
**QUARTERLY MONITORING REPORT
ACTIVE TREATMENT SYSTEMS
SECOND QUARTER 2009**

**AMERICAN CHEMICAL SERVICE NPL SITE
GRIFFITH, INDIANA**

MWH File No. 4050577

Prepared For:

**American Chemical Service NPL Site RD/RA Executive Committee
Griffith, Indiana**

Prepared By:

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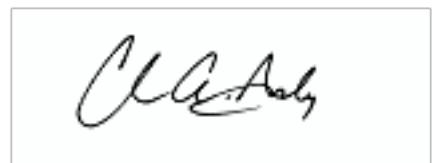
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December 22, 2009

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ACRONYMS AND ABBREVIATIONS

ACS	American Chemical Service, Inc.
AMSL	Above Mean Sea Level
AS	Air Sparge
BOD	Biological Oxygen Demand
BW	Barrier Wall
BWES	Barrier Wall Extraction System
cfm	cubic feet per minute
DL	Detection Limit
DPE	Dual Phase Extraction
GAC	Granular Activated Carbon
Global	Global Technologies
GWTP	Groundwater Treatment Plant
"Hg	Inches of mercury
"H ₂ O	Inches of water
IDEM	Indiana Department of Environmental Management
ISVE	In-situ Soil Vapor Extraction
K-P	Kapica Pazmey
lb/day	Pounds per day
lb/hr	Pounds per hour
LDC	Laboratory Data Consultants
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
MWH	MWH Americas, Inc.
NC	Not Calculated
ND	Not Detected
NE	No Effluent Limit Established
NPL	National Priorities List
NS	Not Sampled
OFCA	Off-Site Containment Area
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
PGCS	Perimeter Groundwater Containment System
ppm	Parts per million
PSVP	Performance Standard Verification Plan
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
SBPA	Still Bottoms Pond Area
SVOCs	Semi-Volatile Organic Compounds
T-102	Aeration Equalization Tank (Tank – 102)
Therm Ox 1	Thermal Oxidizer/Scrubber Unit 1
Therm Ox 2	Thermal Oxidizer/Scrubber Unit 2
TOC	Top of Casing
TOIC	Top of Inner Casing

TOSG	Top of Staff Gauge
TSS	Total Suspended Solids
μg	Micrograms
$\mu\text{g/kg}$	Micrograms per kilogram
$\mu\text{g/L}$	Micrograms per liter
U.S. EPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

MWH Americas, Inc. (MWH), on behalf of the American Chemical Service (ACS) Executive Committee, started up the on-site groundwater treatment system at the ACS National Priorities List (NPL) Site (ACS Site) in Griffith, Indiana on March 13, 1997. The groundwater treatment plant (GWTP) system was designed to treat groundwater from the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall Extraction System (BWES). The original treatment consisted of a phase-separator for oil and free product removal, equalization tanks, an UV oxidation unit for destruction of organic constituents, and an air stripper to remove methylene chloride and other organics. The treatment also included a chemical precipitation and clarification unit to remove metals, a sand filter to remove suspended solids, and activated carbon vessels for final polishing of the treated groundwater before it was released to the west of the Site.

In 2001, an activated sludge treatment unit was added to the process to reduce the volatile and semivolatile organic compounds (VOCs and SVOCs) in the collected groundwater. The activated sludge treatment process also reduces the amount of activated carbon required to treat the water. An aerated equalization tank was also added to the GWTP in 2001 to remove VOCs from the collected groundwater, oxidize metals to increase metals removal efficiency in the chemical precipitation unit, and equalize groundwater flow through the GWTP. The activated sludge system and aeration tank have been fully integrated into the process along with the other upgrade components. Startup and optimization of the catalytic oxidizer/scrubber air treatment unit was also conducted during 2001.

The treated effluent from the treatment system is discharged to the nearby wetlands, west of the treatment system, in accordance with Agency approvals.

Operation of the In-situ Soil Vapor Extraction (ISVE) system for the Off-Site Containment Area (OFCA) and the Kapica-Pazmey (K-P) Area began on May 1, 2002. Operation of the ISVE system for the Still Bottoms Pond Area (SBPA) began in July 2003. The ISVE systems were designed to remove volatile and semi-volatile compounds from the subsurface media.

The Off-Site Area ISVE system consists of 42 ISVE wells, 3 air sparge wells, ISVE and air sparge blower systems, a thermal oxidizer/scrubber unit, and the associated mechanical and electrical components. Protocols and goals for the phased startup of the Off-Site System as defined in the Final Remedy (Montgomery Watson, 1999) were followed. In 2004, an additional blower unit was added to the Off-Site Area ISVE system to more effectively meet the design objectives of the system. The additional blower increased the capacity of the Off-Site ISVE system from 1,000 to 2,000 cubic feet per minute (cfm).

The SBPA ISVE system consists of 25 ISVE wells, 21 dual-phase extraction (DPE) wells, 6 air sparge wells, ISVE and air sparge blower systems, a thermal oxidizer/scrubber unit, and the associated mechanical and electrical components. During the first 12 months of system operation, the performance of the ISVE system was evaluated. Based on this evaluation, the

SBPA ISVE system was enhanced in accordance with the United States Environmental Protection Agency (U.S. EPA) and Indiana Department of Environmental Management (IDEM) approval by reconfiguring 18 of the ISVE wells to allow injection of air. Air for the injection wells is directed from blower ME-102/103 at the GWTP to the SBPA ISVE blower shed. The air injection system, which consists of three groups of five injection wells, began operation in December 2005. The air injection wells were previously rotated among the three well groups on a monthly basis with only one well group operating at a time. However, only one air injection group has been operating since August 2008. This group is targeting wells with historically higher VOC concentrations in order to optimize VOC removal. On July 15, 2009 all of the SBPA ISVE wells began operating in extraction mode, and the use of air injection was discontinued. This configuration will be used to provide baseline measurements for VOC removal prior to implementing alternate well configurations.

This report summarizes GWTP effluent analytical data and thermal oxidizer off-gas analytical data, ISVE process monitoring data, and water level gauging data collected from April 2009 through June 2009 (second quarter 2009). The report also details modifications and upgrades that were made to the active treatment systems during the reporting period.

2.0 GWTP COMPLIANCE MONITORING

2.1 SAMPLING REQUIREMENTS

Effluent samples are collected on a regular schedule from the treatment system to demonstrate compliance with the discharge limits (**Table 2.1**) established by the Indiana Department of Environmental Management (IDEM) and the United States Environmental Protection Agency (U.S. EPA). The approved Performance Standard Verification Plan for the PGCS (PSVP) (Montgomery Watson, July 1997) requires quarterly effluent sampling for biochemical oxygen demand (BOD), total suspended solids (TSS), SVOCs, metals, and polychlorinated biphenyls (PCBs) in the system, and monthly effluent sampling for pH and VOCs, as tabulated below. In accordance with the PSVP, a full analysis effluent compliance sample was collected during April 2009 and analyzed for all of the analytes listed above. During May and June 2009, the monthly effluent compliance samples were analyzed for VOCs and pH only, also in accordance with the PSVP.

Sampling and analyses were performed in accordance with the approved Quality Assurance Project Plan (QAPP) (Montgomery Watson Harza, November 2001) and Addendum No. 1 to the QAPP (MWH, April 2007) during the reporting period. Quality control measures were also instituted in accordance with the PSVP. The following table and paragraphs present details on sampling and analyses and also summarize the analytical data for the treatment system effluent.

Sampling Frequency Schedule – Groundwater Treatment System

Analytes	Cumulative Time From Startup*	Frequency
Flowrate	–	Continuous
BOD, TSS, SVOCs and Metals	181 days onward	Once per quarter
VOCs and Ph	31 days onward	Once per month
PCBs	181 days onward	Once per quarter
PCBs in Sediment (one location)	–	Once per year

*Note: System operation began on March 13, 1997

2.2 EFFLUENT SAMPLING AND ANALYSES

Effluent samples were collected each month during the second quarter of 2009. Samples were collected on the following dates and analyzed for the listed analytes for this reporting period:

April 14, 2009	Full analysis (pH, TSS, BOD, Metals, VOCs, SVOCs, pentachlorophenol, and PCBs)
May 12, 2009	pH and VOCs
June 25, 2009	pH and VOCs

The above samples were collected directly from a sampling port on the effluent line of the treatment system. The samples were placed in contaminant-free containers, in accordance with the *U.S. EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers* (U.S. EPA, 1992). Appropriate sample containers and preservatives, as specified in the QAPP, were used to collect and preserve the samples. Following sample collection, the temperature of the sample containers was maintained at or below 4° C in coolers. Chain-of-Custody forms were prepared to track the transfer of samples from the treatment system to the laboratories. In accordance with the approved QAPP, the effluent water samples were analyzed for the following parameters by the following analytical methods:

<u>Parameter</u>	<u>Analytical Method</u>
VOCs	SW-846 8260B
SVOCs	SW-846 8270C
Pentachlorophenol	SW-846 8270C and SIM
Pesticides/PCBs	EPA 608/SW-846 8081/8082
Metals (Excluding Mercury)	
General Water Quality	SW-846 6010
Parameters (TSS and BOD-5)	EPA 160.2 and 405.1
Mercury	SW-846 7470
pH	EPA 150.1

2.3 EFFLUENT ANALYTICAL RESULTS

2.3.1 GWTP Effluent Samples

The GWTP effluent monitoring data summarized in [Table 2.2](#), verify that the system effluent was compliant with the discharge limits summarized in [Table 2.1](#). No effluent exceedences were reported in the April, May, or June samples.

Microbac Laboratory of Merrillville, Indiana performed the analysis of the samples. Laboratory Data Consultants (LDC) of Carlsbad, California performed third party data validation in accordance with the U.S. EPA National Functional Guidelines for Organic/Inorganic Data Review (U.S. EPA, February 1994 and October 1999). Validation qualifiers are listed in [Table 2.2](#) and are written in the margin of the analytical data sheets provided in [Appendix A](#).

3.0 ISVE SYSTEM MONITORING

3.1 THERMAL OXIDIZER OFF-GAS SAMPLING

During the second quarter of 2009, Thermal Oxidizer/Scrubber Unit 1 (Therm Ox 1) was used to treat vapors from the SBPA ISVE system and Thermal Oxidizer/Scrubber Unit 2 (Therm Ox 2) was used to treat vapors from the Off-Site ISVE system and T-102. Monthly VOC removal rates are illustrated in [Figure 3.1](#) and the total VOCs removed are shown on [Figure 3.2](#). Compliance samples were collected from the thermal oxidizer/scrubber units on April 23rd, May 12th, and June 10th.

Influent and effluent off-gas samples were collected directly from sampling ports on the influent pipe to the thermal oxidizer and the discharge stack of the scrubber. One influent sample and one effluent sample were collected. A duplicate influent sample was also collected. The samples were collected to comply with the PSVP and QAPP and in accordance with laboratory guidelines. The VOC samples were collected using a Summa canister and the SVOC samples were collected in sorbent tubes.

Sampling Frequency Schedule – ISVE System

Startup	Weekly for a four week period
Post-Startup	Monthly in accordance with the IDEM Air Permit Equivalency

Following sample collection, the sorbent tubes were placed in coolers and maintained at or below 4°C for shipment. Chain-of-Custody forms were prepared to track the transfer of samples from the treatment plant to the laboratories for extraction and analysis. In accordance with the approved QAPP and addenda, the off-gas samples were analyzed by the following analytical methods:

<u>Parameter</u>	<u>Analytical Method</u>
VOCs	TO-15
SVOCs	TO-13

Per Addendum No. 1 to the QAPP (MWH, April 2007), Microbac Laboratory of Merrillville, Indiana is now the primary analytical laboratory for air analyses for the project. Microbac performs VOC analysis by Method TO-15.

3.2 SAMPLING RESULTS

The influent and effluent off-gas data are collected to verify that the off-gas from both of the thermal oxidizers was less than the IDEM discharge limit of three pounds of VOCs per hour (lbs/hr) and 15 pounds per day (lbs/day) for April, May, and June. The highest VOC discharge rate observed during these sampling events was the May 12, 2009 Therm Ox 2 sample, which was measured at 0.046 pounds per hour or 1.10 pounds per day. Both of

these rates are below the corresponding discharge limits. Therefore, it can be concluded that the ISVE systems are performing well within discharge limits for air emissions.

VOC discharge values for Therm Ox 1, Therm Ox 2, and the SBPA and Off-Site ISVE system are presented in [Tables 3.1 through 3.9](#). The analytical data sheets for the compliance samples are provided in [Appendix B](#). In addition to the off-gas data collected during the second quarter, MWH collected off-gas samples from the Off-Site ISVE system and the SBPA ISVE system influent lines. These samples were collected in order to comply with the PSVP.

Microbac Laboratory of Merrillville, Indiana analyzed all of the vapor samples. The analytical results are summarized in [Tables 3.1 through 3.18](#). Laboratory Data Consultants (LDC) of Carlsbad, California performed third party data validation in accordance with the QAPP and the National Functional Guidelines for Organic/Inorganic Data Review. Validation qualifiers are listed in the tables and are written in the margin of the analytical data sheets provided in [Appendix B](#).

3.3 ISVE SYSTEM MONITORING

Performance monitoring of the ISVE system was conducted in accordance with the PSVP (Montgomery Watson, June 1999). Extracted vapor flow rates and vacuum pressures at individual ISVE wells and headers were measured and recorded on a routine basis. Additionally, VOC concentrations were measured at individual wells and headers using a photoionization detector (PID).

The information collected during performance monitoring is used to evaluate and optimize the ISVE system. Data collected from the Off-Site ISVE system during the second quarter of 2009 are presented in [Tables 3.19](#) and [3.20](#). Data that were collected from the SBPA ISVE system during the second quarter of 2009 are presented in [Tables 3.21](#) and [3.22](#).

3.4 PRODUCT REMOVAL ACTIVITIES

MWH performed product removal activities on a weekly or bi-weekly basis during the second quarter of 2009 from wells in the Off-Site Area with measureable product. Product was also removed from target wells in the SBPA area (SVE-52, SVE-53, SVE-61, SVE-62, SVE-72, SVE-81, and SVE-88) on a bi-weekly basis in May and June 2009. Product removal is performed using a large vacuum hose which transfers the free product to 55-gallon steel drums. Approximately 260 gallons of product were removed from Off-Site wells and 310 gallons of product were removed from SBPA wells during the second quarter of 2009. The drums of product are stored at the Site until arrangements are made for their proper disposal. MWH shipped nine drums of free product off site in May 2009 and 14 drums of free product off site in August 2009 to be disposed of as hazardous waste. MWH will continue to properly dispose of the free product within 90 days of being generated.

4.0 GWTP PROCESS MODIFICATIONS AND REPAIRS

4.1 GWTP PROCESS MODIFICATIONS

The following modifications were made to the GWTP during the second quarter of 2009:

- Beginning in November 2008, operation of the biotank has been isolated to the smaller zone. The unit continues to perform well.
- MWH continues to remove residual sludge from the inactive larger aeration zone. The sludge removal activities are anticipated to take several months to complete.

4.2 GWTP REPAIRS AND MAINTENANCE

The following maintenance activities were conducted at the GWTP during the second quarter of 2009:

- Maintenance was performed on the BWES pumps and piping. All of the pumps were removed, inspected, and repaired as necessary. Accumulated silt in the BWES wells was cleared using a vacuum truck. An air compressor was used to clear out the conveyance piping from the BWES to the GWTP.
- Annual maintenance was performed on the dual-phase extraction (DPE) wells in the Still Bottoms Pond Area. All pumps were removed, dismantled and cleaned. While the pumps were removed, the DPE wells were vacuumed out to remove excess water, silt, and/or free product. In addition, an air compressor was used to clear out the conveyance piping from the DPE wells to the GWTP. The DPE wells were re-installed on May 21, 2009.
- The nanofilter malfunctioned in early May 2009. The pump and gear box were rebuilt and the nanofilter returned to service on May 13, 2009.

5.0 ISVE PROCESS MODIFICATIONS AND REPAIRS

5.1 ISVE PROCESS MODIFICATIONS

The following modifications were made to the SBPA ISVE system during the second quarter of 2009:

- One set of air injection wells ran at the ACS site throughout the second quarter of 2009. MWH has maintained the well configuration put into effect on August 29, 2008. This configuration consists of a combination of air injection wells from Groups 1 and 2 (SVE-54, SVE-59, SVE-77, SVE-80, and SVE-84) to target areas of the subsurface with higher VOC concentrations. In addition, three to four air sparge points have been operating.
- Beginning in the third quarter of 2009, all SBPA ISVE wells will be operating in extraction mode. This configuration will be used to provide baseline measurements for VOC removal prior to implementing alternate well configurations.

No modifications were made to the Off-Site ISVE system during the second quarter of 2009.

5.2 ISVE REPAIRS AND MAINTENANCE

The following maintenance activities were conducted on the ISVE systems during the second quarter of 2009:

- On May 22, 2009, one of the Off-Site ISVE blowers began leaking oil. The unit was shut down and inspected. It was determined that the blower needed to be replaced. A new blower unit was installed and the system resumed normal operation on June 26, 2009.
- On May 22, 2009, a bearing failed on the AS air compressor in the Off-Site Area. The unit was shut off immediately and repairs were completed during the week ending May 29, 2009.
- On July 13 and 14, 2009, SVE wells in both the SBPA and Off-Site areas were pressure washed at 2,000 psi. Each well was vacuumed out after cleaning. Approximately 1,500 gallons of liquid was vacuumed out of the SVE wells and transferred to the GWTP for treatment.

6.0 PGCS AND BWES GAUGING ACTIVITIES

During the operational time frame of the GWTP in the second quarter of 2009, the PGCS groundwater extraction trenches were operated in “auto” mode. In “auto” mode, the PGCS extraction wells pump continuously unless there is a low water level in individual extraction wells or a high water level in the Aeration Equalization Tank (T-102). This mode is used to control the flowrate through the treatment system, while at the same time creating an inward gradient along the PGCS trench. The GWTP also received influent from the On-Site and Off-Site components of the BWES, the SBPA DPE wells, MW-10C, MW-56, and the Lower Aquifer Pumping System during the second quarter of 2009.

In accordance with the PSVP, a discussion on the effect of the PGCS and BWES on the water table near the Site is presented in each quarterly monitoring report. This section summarizes the groundwater elevations at the Site during April, May, and June 2009. Groundwater elevation measurements were collected throughout the Site on June 25, 2009 as part of the groundwater monitoring program. The groundwater elevations are listed in **Table 6.1** and the resulting water table contours outside the barrier wall based on these measurements are shown on **Figure 6.1**.

The barrier wall was constructed in 1997 to contain the contaminated zone under the Site and the BWES was installed to extract groundwater from within the barrier wall and dewater the Site for the ISVE system. Nine pairs of piezometers were installed, with one piezometer of each pair on either side of the barrier wall, spaced along the barrier wall alignment. This allows measurement and tracking of water levels in order to document that the barrier wall is serving its designed function.

Table 6.1, Water Table Elevations Across the Barrier Wall and Near the PGCS, presents the groundwater elevations inside and outside the barrier wall measured on June 25, 2009. The groundwater elevations are plotted on **Figure 6.2**. All of the piezometer pairs, with the exception of P93R/P94R, indicated lower groundwater elevations inside the barrier wall than those outside the barrier wall. At piezometer pair P93R/P94R, the groundwater elevation inside the barrier wall was slightly higher than the groundwater elevation outside the barrier wall (0.23 feet). Historical measurements at this location typically show lower groundwater elevations inside the barrier wall. The other piezometer pairs showed groundwater elevations between 1.49 and 8.68 feet lower inside the barrier wall. In general, the data demonstrates that the barrier wall is successfully performing the intended function of isolating and protecting the groundwater outside the barrier wall from the source areas of the Site inside the barrier wall. MWH will continue to collect water level measurements quarterly across the Site as required in the PSVP. In addition, quarterly water level measurements will continue to be collected at piezometer pair P93R/P94R to see if the higher groundwater elevations outside the barrier wall at this location continue.

As part of the optimization of the GWTP and BWES upgrades, MWH began active dewatering of the Off-Site Area through increased groundwater pumping rates on September 25, 2001. Active dewatering of the SBPA (On-Site Area) began on

February 11, 2003 with the addition of the DPE wells. Water levels were measured throughout the quarter at piezometer locations (P29, P31, P32, P36, and P49) in the On-Site Area and at piezometers (P96, P110, P112, P113, P114, P116, P118) and three air sparge (AS) wells (AS-7, AS-8, and AS-9) in the Off-Site Area. These locations are shown on **Figure 6.3**. The water level trend data from these piezometers and AS wells for the second quarter of 2009 are depicted graphically on **Figures 6.4** and **6.5**, which also show the target water elevations for each area. In the SBPA, the target water level is 629 feet amsl. Water levels in two piezometer locations (P-29 and P-31) have been drawn down to below the bottom of the screens in these wells throughout the second quarter of 2009. Therefore, the depth to water measurements at these locations show straight-line measurements of the bottom of the wells. The other locations had water levels that varied from approximately 627 feet amsl to 632 feet amsl. Water levels in the SBPA area showed a slightly increasing trend throughout the second quarter of 2009.

In the Off-Site ISVE area, the target water level is 626 feet amsl. Actual water levels varied from approximately 621 feet amsl to 637 feet amsl. Water levels in the Off-Site area showed a relatively stable trend throughout most of the second quarter of 2009.

MWH will continue to monitor the water levels in both the SBPA and Off-Site Area.

7.0 SYSTEM OPERATION

The GWTP operated as designed 96 percent of the second quarter of 2009 (based on 2,252 hours of operation out of a total of 2,352 hours). The system drew influent water from the On-Site Area BWES, the Off-Site Area BWES, the PGCS, MW-10C, MW-56, and the Lower Aquifer Pumping System.

The Off-Site Area ISVE system operated as designed 76 percent of the second quarter of 2009 (based on 1,533 hours of operation out of a total of 2,016 hours). The SBPA ISVE system operated as designed 80 percent of the second quarter of 2009 (based on 1,874 hours of operation out of a total of 2,352 hours). The majority of the downtime for the ISVE systems was associated with maintenance of the thermal oxidizers.

8.0 CONCLUSIONS AND RECOMMENDATIONS

This section provides a summary of the operational status of the active remedial systems at the ACS NPL site for the subject period. Anticipated activities for the upcoming quarter and recommendations for system modifications are also provided.

8.1 GWTP OPERATION

The GWTP continued to operate normally during the second quarter of 2009. During this time period, maintenance was performed on the BWES and the dual-phase extraction wells in the SBPA Area.

The GWTP continued to treat water from all available sources. The list of sources was expanded in September 2007 with the completion of the Lower Aquifer Pumping System and the replacement of the pump in MW-10C.

8.2 ISVE OPERATION

The ISVE systems continued to operate normally during the second quarter of 2009. The operational time of both systems was less than 100% primarily as a result of maintenance activities conducted on the thermal oxidizers. MWH will continue to perform O&M services on the thermal oxidizer units to ensure adequate operational time for the ISVE systems. As shown in [Figure 3.1](#), the VOC removal rates (in pounds per day) were observed to be within the range previously observed.

While performance data for the ISVE systems indicates that the systems continue to be effective in treating the vadose zone soils, the data also suggests that the systems could be operated more efficiently. As the remediation has progressed, mass removal rates at some wells have become limited while rates remain higher at other locations. Going forward, MWH will make minor modifications to the operational settings under which the systems operate. Actions will be taken to achieve similar or greater VOC removal rates often at lower costs through reduced energy usage. The goal of alternate configurations would be to achieve one or more of the following objectives:

- To maximize VOC mass removal rates from the target areas;
- To concentrate the operation of the system on wells that are indicating higher levels of VOC concentrations (hot spots);
- To reduce energy (electrical and natural gas) usage rates while maintaining overall system performance;
- To reduce the carbon footprint of the active treatment systems;
- To reduce wear on existing equipment.

Alternate system configurations include, but are not limited to:

For the Off-Site System,

1. Pulsing system operation to allow concentrations of VOCs in the subsurface to rebound during “off” cycles, maximizing efficiency during “on” cycles.
2. Shutting down one of the two vacuum extraction blowers and concentrating operation on a reduced number of ISVE wells, excluding wells that are shown to produce lower levels of VOC concentrations.
3. Removing the caps from selected wells while vacuum is not being applied to them to promote increased air flow through the vadose zone soils from the opened wells to adjacent active extraction wells. Removing well caps will not result in the release of VOCs since active soil vapor extraction maintains negative pressure.
4. Combining the extracted vapor stream with the SBPA system in order to use only one thermal oxidizer system.

For the SBPA System,

1. Pulsing system operation to allow concentrations of VOCs in the subsurface to rebound during “off” cycles, maximizing efficiency during “on” cycles.
2. Concentrating operation of the extraction system to a reduced number of ISVE wells, excluding wells that are shown to produce lower levels of VOC concentrations.
3. Removing the caps from selected wells while vacuum is not being applied to them to promote increased air flow through the vadose zone soils from the opened wells to adjacent active extraction wells. Removing well caps will not result in the release of VOCs since active soil vapor extraction maintains negative pressure.
4. Discontinuing the air injection regime at ISVE wells configured to allow injection of air.
5. Reducing the overall extraction flow rate.

The configurations listed above are not meant to be comprehensive but represent the types of modifications that MWH may take to improve system efficiency. From time to time, other actions not identified above may be taken to achieve the same objectives. All of the potential actions would be taken in order to accomplish remedial objectives and milestones established by the Record of Decision (ROD). Each temporary modification will be documented in the system log and will be available for inspection by the Agencies at the Site. Beginning in the third quarter of 2009, all ISVE wells will be operating in extraction mode. This configuration will be used to provide baseline measurements for VOC removal prior to implementing the alternate configurations listed above.

8.3 GROUNDWATER LEVEL MONITORING

As indicated in Section 6.0, the groundwater extraction system continues to successfully perform its intended function of isolating and protecting the groundwater outside the barrier wall from the source areas of the Site inside the barrier walls.

MWH continues to perform liquid removal activities in order to decrease water levels in wells that have risen above the target level. Throughout the second quarter of 2009, liquid was pumped from Off-Site Area wells with high water or free product levels on a weekly or bi-weekly basis. In addition, MWH performed liquid removal from target wells in the SBPA Area on a bi-weekly basis during May and June 2009. See **Section 3.4** for specific details.

8.4 HEALTH AND SAFETY

No health and safety incidents were reported during the second quarter of 2009. MWH continues to perform site activities in accordance with the site Health and Safety Plan and all applicable addendums.

Health and Safety statistics for the ACS Site as of June 30, 2009 are:

- 4,420 consecutive days with no lost time due to an accident or Health and Safety incident.
- 2,112 consecutive days without an incident requiring first aid.

9.0 REFERENCES

1. *Final Remedial Design Report: Final Remedy, ACS NPL Site*, Montgomery Watson, August 1999.
2. *Performance Standard Verification Plan, ACS NPL Site*, Montgomery Watson, July 1997.
3. *Performance Standard Verification Plan, ACS NPL Site*, Montgomery Watson, June 1999.
4. *Phase I Technical Memorandum Wetland Investigation, ACS NPL Site*, Montgomery Watson, July 1996.
5. *Phase II Technical Memorandum Wetland Investigation, ACS NPL Site*, Montgomery Watson, February 1997.
6. *Quality Assurance Project Plan, ACS NPL Site*, Montgomery Harza, March 2001.
7. *Quality Assurance Project Plan, Addendum No. 1, ACS NPL Site*, MWH, April 2007.
8. *U.S. EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers*, United States Environmental Protection Agency, 1992.
9. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, U.S. EPA, February 1994.
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TABLES

Table 2.1
Groundwater Treatment System Effluent Discharge Limits
American Chemical Service NPL Site
Griffith, Indiana

Groundwater Quality Parameter	Effluent Standard (Limit)
General Water Quality Parameters	
pH	6 - 9 S.U.
BOD-5	30 mg/L
TSS	30 mg/L
Inorganics	
Arsenic	50 µg/L
Beryllium	NE
Cadmium	4.1 µg/L
Manganese	NE
Mercury ¹	0.02 µg/L (w/DL = 0.64)
Selenium	8.2 µg/L
Thallium	NE
Zinc	411 µg/L
Volatile Organics	
Acetone	6,800 µg/L
Benzene	5 µg/L
2-Butanone	210 µg/L
Chloromethane	NE
1,4 – Dichlorobenzene	NE
1,1 – Dichloroethane	NE
1,2 – Dichloroethene – cis	70 µg/L
Ethylbenzene	34 µg/L
Methylene chloride	5 µg/L
Tetrachloroethene	5 µg/L
Trichloroethene	5 µg/L
Vinyl chloride	2 µg/L
4 – Methyl – 2 – pentanone	15 µg/L
Semi-Volatile Organics	
bis(2 – Chloroethyl) ether	9.6 µg/L
bis(2 – Ethylhexyl) phthalate	6 µg/L
Isophorone	50 µg/L
4 – Methylphenol	34 µg/L
Pentachlorophenol	1 µg/L
PCBs	
PCBs ¹	0.00056 µg/L (w/DL = 0.1 to 0.9)

Notes:

1. Effluent standards for the Groundwater Treatment Plant were established based on maximum contaminant levels, Indiana water quality effluent limits, or best available treatment technologies. However, laboratory equipment could not read down to the effluent standards for mercury or PCBs. Therefore, the lowest equipment detection limit (or limit range for PCBs) for these compounds were established as their respective effluent standards.

NE = No effluent limit established.

DL = Detection limit

S.U. = Standard pH units

mg/L - micrograms per Liter

TSS = Total suspended solids

BOD = Biological oxygen demand

Table 2.2
Summary of Effluent Analytical Results - Second Quarter 2009
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event Date	Month 143 4/14/2009	Month 144 5/12/2009	Month 145 6/25/2009	Effluent Limits	Lab Reporting Limits
pH	7.06 H/J	7.07 H/J	7.00 H/J	6-9	none
TSS	1.0 U/	NS	NS	30	1.0
BOD	2.0 U/	NS	NS	30	2
Arsenic	10 U/	NS	NS	50	10
Beryllium	1.0 U/	NS	NS	NE	1.0
Cadmium	2.0 U/	NS	NS	4.1	2.0
Manganese	220	NS	NS	NE	2.0
Mercury ¹	0.2 U/	NS	NS	0.02 (w/DL = 0.64)	0.2
Selenium	30 U/	NS	NS	8.2	30
Thallium	50 U/	NS	NS	NE	50
Zinc	20 U/	NS	NS	411	20
Benzene	1.0 U/	1.0 U/	1.0 U/UJ	5	1.0
Acetone	5.0 U/	16 /	3.4 J/	6,800	5.0
2-Butanone	2.0 U/UJ	2.0 U/UJ	2.0 U/	210	2.0
Chloromethane	2.0 U/UJ	2.0 U/	2.0 U/	NE	2.0
1,4-Dichlorobenzene	1.0 U/	1.0 U/	1.0 U/UJ	NE	1.0
1,1-Dichloroethane	4.7 /	7.7 /	6.2 J/	NE	1.0
cis-1,2-Dichloroethene	23 /	52 /	44 /	70	1.0
Ethylbenzene	1.0 U/	1.0 U/	1.0 U/UJ	34	1.0
Methylene chloride	2.0 U/	2.0 U/	2.0 U/	5	2.0
Tetrachloroethene	1.0 U/	0.63 J/	1.0 U/	5	1.0
Trichloroethene	0.36 J/	0.97 J/	0.79 J/	5	1.0
Vinyl chloride	0.57 J/	1.4 J/	1.3 J/	2	2.0
4-Methyl-2-pentanone	1.0 U/	1.0 U/	1.0 U/	15	1.0
bis (2-Chloroethyl) ether	5.1 U/	NS	NS	9.6	5.1
bis(2-Ethylhexyl) - phthalate	1.1 Jb/U	NS	NS	6	5.1
4 - Methylphenol	5.1 U/	NS	NS	34	5.1
Isophorone	5.1 U/	NS	NS	50	5.1
Pentachlorophenol	25 U/	NS	NS	1	25
PCB/Aroclor-1016 ¹	0.52 U/	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.52
PCB/Aroclor-1221 ¹	0.52 U/	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.52
PCB/Aroclor-1232 ¹	0.52 U/	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.52
PCB/Aroclor-1242 ¹	0.52 U/	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.52
PCB/Aroclor-1248 ¹	0.52 U/	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.52
PCB/Aroclor-1254 ¹	0.52 U/	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.52
PCB/Aroclor-1260 ¹	0.52 U/	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.52

Notes:

Bolded result indicates a exceedence of the discharge limit
pH data is expressed in S.U.

BOD and TSS data is expressed in mg/L

Metals, VOC, SVOC and PCB data is expressed in ug/L

1. Effluent standards for the Groundwater Treatment Plant were established based on maximum contaminant levels, Indiana water quality effluent limits, or best available treatment technologies. However, laboratory equipment could not read down to the effluent standards for mercury or PCBs. Therefore, the lowest equipment detection limit (or limit range for PCBs) for these compounds were established as their respective effluent standards.

ND = Not detected

NS = This analyte was not sampled or analyzed for

NE = No effluent limit established.

DL = Detection limit

Suffix Definitions:

/ = Data qualifier added by laboratory

/_ = Data qualifier added by data validator

J = Result is detected below the reporting limit and is an estimated concentration.

U = Analyte is not detected at or above the indicated concentration.

UJ = Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value, however the calibration was out of range. Therefore the concentration is estimated.

H = Analyte was prepared and/or analyzed outside of the analytical method holding time.

Jb = Detected in the associated Method Blank at a concentration between the Reporting Limit and Method Detection Limit.

Table 3.1
Thermal Oxidizer 1 Results for Method TO-15 (VOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/13/09						
		Therm-Ox 1					Destruction Efficiency	
		Influent		Influent Dup		Effluent		Low
1,1,1-Trichloroethane	ppbv	10,000		9,900		28		99.72% 99.72% 99.72%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
1,1,2-Trichloroethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
1,1-Dichloroethane	ppbv	840		880		5.5		99.35% 99.38% 99.36%
1,1-Dichloroethene	ppbv	31		31		14		54.84% 54.84% 54.84%
1,2-Dichloroethane	ppbv	86		85		0.88		98.96% 98.98% 98.97%
1,2-Dichloropropane	ppbv	ND	U	ND	U	ND	U	NC NC NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	94	J	89	J	2.8		NC NC NC
2-Hexanone	ppbv	ND	U	ND	U	ND	U	NC NC NC
4-Methyl-2-pentanone	ppbv	370		250		6.3		97.48% 98.30% 97.89%
Acetone	ppbv	170		260		3.0		98.24% 98.85% 98.54%
Benzene	ppbv	660		700		13		98.03% 98.14% 98.09%
Bromodichloromethane	ppbv	33		ND	U	ND	U	NC NC NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC NC NC
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Carbon Disulfide	ppbv	ND	U	ND	U	ND	U	NC NC NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	ND	U	NC NC NC
Chlorobenzene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Chloroethane	ppbv	90	/J	83	/J	0.78		NC NC NC
Chloroform	ppbv	1,000		970		4.8		99.51% 99.52% 99.51%
Chloromethane	ppbv	ND	U	ND	U	0.84	J	NC NC NC
cis-1,2-Dichloroethene	ppbv	3,300		3,300		10		99.70% 99.70% 99.70%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Ethyl Benzene	ppbv	1,300		1,100		9.0		99.18% 99.31% 99.24%
m,p-Xylene	ppbv	5,100		4,600		37		99.20% 99.27% 99.24%
Methylene Chloride	ppbv	2,100	/B	2,200	/B	27	/B	NC NC NC
o-Xylene	ppbv	2,500		2,300		16		99.30% 99.36% 99.33%
Styrene	ppbv	25	J	23	J	1.9		NC NC NC
Tetrachloroethene	ppbv	5,100		4,900		32		99.35% 99.37% 99.36%
Toluene	ppbv	4,600		4,500		77		98.29% 98.33% 98.31%
trans-1,2-Dichloroethene	ppbv	23	J	24	J	2.5		NC NC NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Trichloroethene	ppbv	3,200		3,200		19		99.41% 99.41% 99.41%
Vinyl Chloride	ppbv	280		250		0.49	J	NC NC NC
Total	ppbv	40,902		39,645		311.8		99.21% 99.24% 99.23%
Total	lb/hr	0.641		0.621		0.004		99.36% 99.38% 99.37%

Notes:

NC - Not calculated
 ppbv - Parts per billion volume
 lb/hr - Pounds per hour

Qualifiers:

U - Below reported quantitation limit
 J - Result is estimated
 B - Compound or analyte was positively detected in sample and in associated blank.
 /J - Laboratory data qualifier
 /_ - Data validation qualifier

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

System	Date	Temp (F)	Flow (scfm)
Therm-Ox 1	04/13/09	89	841

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.2
Thermal Oxidizer 1 Results for Method TO-15 (VOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09						
		Therm-Ox 1					Destruction Efficiency	
		Influent		Influent Dup		Effluent		Low
1,1,1-Trichloroethane	ppbv	9,700		4,900		33		99.33% 99.66% 99.49%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
1,1,2-Trichloroethane	ppbv	ND	U	ND	U	0.36	J	NC NC NC
1,1-Dichloroethane	ppbv	810		650		8.6		98.68% 98.94% 98.81%
1,1-Dichloroethene	ppbv	25	J	20	J	8.8	/J	NC NC NC
1,2-Dichloroethane	ppbv	84		67		1.3		98.06% 98.45% 98.26%
1,2-Dichloropropane	ppbv	56		48		ND	U	NC NC NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	99	J	95	J	11		NC NC NC
2-Hexanone	ppbv	ND	U	ND	U	0.61	J	NC NC NC
4-Methyl-2-pentanone	ppbv	400		310		8.9		97.13% 97.78% 97.45%
Acetone	ppbv	210	/U	220	/U	16	b	NC NC NC
Benzene	ppbv	520		320		17		94.69% 96.73% 95.71%
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC NC NC
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Carbon Disulfide	ppbv	ND	U	ND	U	ND	U	NC NC NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	ND	U	NC NC NC
Chlorobenzene	ppbv	ND	U	51		ND	U	NC NC NC
Chloroethane	ppbv	31		44		0.90		97.10% 97.95% 97.53%
Chloroform	ppbv	1,100		800		8.4		98.95% 99.24% 99.09%
Chloromethane	ppbv	ND	U	ND	U	0.84	J	NC NC NC
cis-1,2-Dichloroethene	ppbv	3,000		2,700		14		99.48% 99.53% 99.51%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Ethyl Benzene	ppbv	1,400		1,200		14		98.83% 99.00% 98.92%
m,p-Xylene	ppbv	5,500		5,500		46		99.16% 99.16% 99.16%
Methylene Chloride	ppbv	1,900		1,500		23		98.47% 98.79% 98.63%
o-Xylene	ppbv	2,600		2,600		19		99.27% 99.27% 99.27%
Styrene	ppbv	26	J	23	J	3.7		NC NC NC
Tetrachloroethene	ppbv	5,100		4,700		35		99.26% 99.31% 99.28%
Toluene	ppbv	4,500		4,300		80		98.14% 98.22% 98.18%
trans-1,2-Dichloroethene	ppbv	22	J	20		1.9		NC NC NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Trichloroethene	ppbv	3,300		3,000		25		99.17% 99.24% 99.20%
Vinyl Chloride	ppbv	110		120		3.70		96.64% 96.92% 96.78%
Total	ppbv	40,493		33,188		381.0		98.85% 99.06% 98.96%
Total	lb/hr	0.633		0.511		0.005		99.02% 99.21% 99.12%

Notes:

NC - Not calculated
 ppbv - Parts per billion volume
 lb/hr - Pounds per hour

Qualifiers:

U - Below reported quantitation limit
 J - Result is estimated
 b - Detected in the associated Method Blank at a concentration between the Reporting Limit and Method Detection Limit.
 / - Laboratory data qualifier
 / - Data validation qualifier

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

System	Date	Temp (F)	Flow (scfm)
Therm-Ox 1	05/12/09	100	835

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.3
Thermal Oxidizer 1 Results for Method TO-15 (VOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09						
		Therm-Ox 1					Destruction Efficiency	
		Influent		Influent Dup		Effluent		Low
1,1,1-Trichloroethane	ppbv	6,800		7,300		42		99.38% 99.42% 99.40%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
1,1,2-Trichloroethane	ppbv	13	J	19	J	ND	U	NC NC NC
1,1-Dichloroethane	ppbv	820		930		9.9		98.79% 98.94% 98.86%
1,1-Dichloroethene	ppbv	28	J	28	J	17		NC NC NC
1,2-Dichloroethane	ppbv	82		110		1.4		98.29% 98.73% 98.51%
1,2-Dichloropropane	ppbv	67		68		ND	U	100.00% 100.00% 100.00%
2-Butanone (Methyl Ethyl Ketone)	ppbv	160		340		5.8		96.38% 98.29% 97.33%
2-Hexanone	ppbv	ND	U	ND	U	ND	U	NC NC NC
4-Methyl-2-pentanone	ppbv	260		390		6.6		97.46% 98.31% 97.88%
Acetone	ppbv	580	/J	820	/J	ND	U	NC NC NC
Benzene	ppbv	770		1,100	/J	30		NC NC NC
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC NC NC
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Carbon Disulfide	ppbv	ND	U	ND	U	ND	U	NC NC NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	ND	U	NC NC NC
Chlorobenzene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Chloroethane	ppbv	22	J	28	J	ND	U	NC NC NC
Chloroform	ppbv	1,600		1,600		11		99.31% 99.31% 99.31%
Chloromethane	ppbv	ND	U	ND	U	0.94	J	NC NC NC
cis-1,2-Dichloroethene	ppbv	2,900		2,900		19		99.34% 99.34% 99.34%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC NC NC
Ethyl Benzene	ppbv	1,500		1,600		18		98.80% 98.88% 98.84%
m,p-Xylene	ppbv	5,700		6,200		47		99.18% 99.24% 99.21%
Methylene Chloride	ppbv	950	/B	1,800	/JB	21	/B	NC NC NC
o-Xylene	ppbv	2,600		2,900		20		99.23% 99.31% 99.27%
Styrene	ppbv	24	J	40		3.0		NC NC NC
Tetrachloroethene	ppbv	6,100		5,900		42		99.29% 99.31% 99.30%
Toluene	ppbv	5,500		6,800		63		98.85% 99.07% 98.96%
trans-1,2-Dichloroethene	ppbv	25	J	24	J	2.0		NC NC NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC NC NC
Trichloroethene	ppbv	4,300		4,600		32		99.26% 99.30% 99.28%
Vinyl Chloride	ppbv	140		130		3.7		97.15% 97.36% 97.26%
Total	ppbv	40,941		45,627		395.3		99.03% 99.13% 99.08%
Total	lb/hr	0.592		0.646		0.005		99.16% 99.23% 99.19%

Notes:

NC - Not calculated
 ppbv - Parts per billion volume
 lb/hr - Pounds per hour

Qualifiers:

U - Below reported quantitation limit
 J - Result is estimated
 B - Compound or analyte was positively detected in sample and in associated blank
 JB - Detected in the associated Method Blank at a concentration between the Reporting Limit and Method Detection Limit
 / - Laboratory data qualifier
 / - Data validation qualifier

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

System	Date	Temp (F)	Flow (scfm)
Therm-Ox 1	06/10/09	102	775

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.4
Thermal Oxidizer 2 Results for Method TO-15 (VOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/13/09						
		Therm-Ox 2					Destruction Efficiency	
		Influent		Influent Dup		Effluent		Low
1,1,1-Trichloroethane	ppbv	9,100		12,000		120		98.68%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	0.27	J	NC
1,1,2-Trichloroethane	ppbv	52		62		1.9		96.35%
1,1-Dichloroethane	ppbv	1,300		1,400		36		97.23%
1,1-Dichloroethene	ppbv	34		38		61		97.43%
1,2-Dichloroethane	ppbv	210		240		6.6		97.25%
1,2-Dichloropropane	ppbv	ND	U	ND	U	1.6		NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	2,500		2,800		34		98.64%
2-Hexanone	ppbv	ND	U	ND	U	0.75	J	NC
4-Methyl-2-pentanone	ppbv	1,000		1,400		13		98.70%
Acetone	ppbv	2,500		2,800		54		98.07%
Benzene	ppbv	3,000		3,300		82		97.27%
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC
Bromomethane	ppbv	ND	U	ND	U	0.37	J	NC
Carbon Disulfide	ppbv	ND	U	ND	U	ND	U	NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	0.45	J	NC
Chlorobenzene	ppbv	ND	U	ND	U	1.7		NC
Chloroethane	ppbv	100	/J	100	/J	1.7		NC
Chloroform	ppbv	1,000		1,100		37		96.30%
Chloromethane	ppbv	ND	U	ND	U	3.3		NC
cis-1,2-Dichloroethene	ppbv	940		1,000		26		97.23%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC
Ethyl Benzene	ppbv	2,700		3,000		49		98.19%
m,p-Xylene	ppbv	11,000		17,000		180		98.36%
Methylene Chloride	ppbv	5,900	/B	11,000	/B	98	/UB	NC
o-Xylene	ppbv	4,500		5,000		73		98.38%
Styrene	ppbv	88		120		32		63.64%
Tetrachloroethene	ppbv	4,500		4,900		110		97.56%
Toluene	ppbv	24,000		30,000		270		98.88%
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U	4.2		NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC
Trichloroethene	ppbv	4,200		4,600		84		98.00%
Vinyl Chloride	ppbv	120		110		15		86.36%
Total	ppbv	78,744		101,970		1,396.8		98.23%
Total	lb/hr	2.227		2.865		0.040		98.20%
								98.63%
								98.43%

Notes:

NC - Not calculated

ppbv - parts per billion volume

lb/hr - pounds per hour

Qualifiers:

U - Below reported quantitation limit

J - Result is estimated

B - Compound or analyte was positively detected in sample and in associated blank.

UB - Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

/ - Laboratory data qualifier

/_ - Data validation qualifier

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

System	Date	Temp (F)	Flow (scfm)
Therm-Ox 2	04/13/09	61	1,715

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.5
Thermal Oxidizer 2 Results for Method TO-15 (VOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09							
		Therm-Ox 2				Destruction Efficiency			
		Influent	Influent Dup	Effluent		Low	High	Average	
1,1,1-Trichloroethane	ppbv	8,800		180		97.88%	97.95%	97.92%	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	NC	NC	NC	
1,1,2-Trichloroethane	ppbv	56		55	1.6	97.09%	97.14%	97.12%	
1,1-Dichloroethane	ppbv	1,500		1,500	37	97.53%	97.53%	97.53%	
1,1-Dichloroethene	ppbv	34		32	41	NC	NC	NC	
1,2-Dichloroethane	ppbv	210		210	5.3	97.48%	97.48%	97.48%	
1,2-Dichloropropane	ppbv	59		61	1.4	97.63%	97.70%	97.67%	
2-Butanone (Methyl Ethyl Ketone)	ppbv	2,500		2,500	35	98.60%	98.60%	98.60%	
2-Hexanone	ppbv	ND	U	ND	U	J	NC	NC	NC
4-Methyl-2-pentanone	ppbv	1,500		1,400	17	98.79%	98.87%	98.83%	
Acetone	ppbv	1,700		1,900	43	/U	NC	NC	NC
Benzene	ppbv	3,300		3,300	100	96.97%	96.97%	96.97%	
Bromodichloromethane	ppbv	ND	U	ND	U	ND	NC	NC	NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC	NC
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC	NC
Carbon Disulfide	ppbv	ND	U	ND	U	ND	U	NC	NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	0.25	J	NC	NC
Chlorobenzene	ppbv	ND	U	ND	U	3.1	NC	NC	NC
Chloroethane	ppbv	180		160		ND	U	100.00%	100.00%
Chloroform	ppbv	1,000		1,000	32		96.80%	96.80%	96.80%
Chloromethane	ppbv	ND	U	ND	U	1.9	J	NC	NC
cis-1,2-Dichloroethene	ppbv	930		960	30		96.77%	96.88%	96.82%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC	NC
Ethyl Benzene	ppbv	2,700		2,700	50		98.15%	98.15%	98.15%
m,p-Xylene	ppbv	11,000		11,000	190		98.27%	98.27%	98.27%
Methylene Chloride	ppbv	7,900		7,600	160		97.89%	97.97%	97.93%
o-Xylene	ppbv	4,500		4,600	79		98.24%	98.28%	98.26%
Styrene	ppbv	120		130	16		86.67%	87.69%	87.18%
Tetrachloroethene	ppbv	4,700		4,800	140		97.02%	97.08%	97.05%
Toluene	ppbv	30,000		33,000	370		98.77%	98.88%	98.82%
trans-1,2-Dichloroethene	ppbv	19	J	20	J	3.0	NC	NC	NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC
Trichloroethene	ppbv	4,400		4,400	110		97.50%	97.50%	97.50%
Vinyl Chloride	ppbv	140		130	11		91.54%	92.14%	91.84%
Total	ppbv	87,248		89,958	1,658.2		98.10%	98.16%	98.13%
Total	lb/hr	2.360		2.424	0.046		98.05%	98.10%	98.08%

Notes:

NC - Not calculated
 ppbv - parts per billion volume
 lb/hr - pounds per hour

Qualifiers:

U - Below reported quantitation limit
 J - Result is estimated
 / - Laboratory data qualifier
 /_ - Data validation qualifier

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

System	Date	Temp (F)	Flow (scfm)
Therm-Ox 2	05/12/09	68	1,655

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.6
Thermal Oxidizer 2 Results for Method TO-15 (VOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09							
		Therm-Ox 2						Destruction Efficiency	
		Influent	Influent Dup	Effluent		Low	High	Average	
1,1,1-Trichloroethane	ppbv	8,300		550		180		67.27%	97.83% 82.55%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC	NC NC
1,1,2-Trichloroethane	ppbv	55		2.1	J	1.3		NC	NC NC
1,1-Dichloroethane	ppbv	1,600		92		37		59.78%	97.69% 78.74%
1,1-Dichloroethene	ppbv	28	J	2.9	J	66		NC	NC NC
1,2-Dichloroethane	ppbv	190		9.1		5.0		45.05%	97.37% 71.21%
1,2-Dichloropropane	ppbv	53		6.3		1.4		77.78%	97.36% 87.57%
2-Butanone (Methyl Ethyl Ketone)	ppbv	1,100		17	J	14		NC	NC NC
2-Hexanone	ppbv	ND	U	ND	U	ND	U	NC	NC NC
4-Methyl-2-pentanone	ppbv	850		23		9.1		60.43%	98.93% 79.68%
Acetone	ppbv	1,900		56		ND	U	100.00%	100.00% 100.00%
Benzene	ppbv	3,600		88		180		NC	NC NC
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Carbon Disulfide	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Chlorobenzene	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Chloroethane	ppbv	53		29		1.3		95.52%	97.55% 96.53%
Chloroform	ppbv	690		110		29		73.64%	95.80% 84.72%
Chloromethane	ppbv	17	J	ND	U	1.9	J	NC	NC NC
cis-1,2-Dichloroethene	ppbv	720		280		32		88.57%	95.56% 92.06%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Ethyl Benzene	ppbv	2,900		160		50		68.75%	98.28% 83.51%
m,p-Xylene	ppbv	12,000		600		180		70.00%	98.50% 84.25%
Methylene Chloride	ppbv	9,000	/B	90	/B	270	/B	NC	NC NC
o-Xylene	ppbv	5,000		360		72		80.00%	98.56% 89.28%
Styrene	ppbv	98		4.6	J	18		NC	NC NC
Tetrachloroethene	ppbv	5,300		490		160		67.35%	96.98% 82.16%
Toluene	ppbv	32,000		530		520		1.89%	98.38% 50.13%
trans-1,2-Dichloroethene	ppbv	ND	U	4.4	J	2.5		NC	NC NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC NC
Trichloroethene	ppbv	5,400		350		140		60.00%	97.41% 78.70%
Vinyl Chloride	ppbv	98		42		0.90		97.86%	99.08% 98.47%
Total	ppbv	90,952		3,896		1,971.4		49.40%	97.83% 73.62%
Total	lb/hr	1.550		0.073		0.034		53.42%	97.81% 75.62%

Notes:

NC - Not calculated
 ppbv - parts per billion volume
 lb/hr - pounds per hour

Qualifiers:

U - Below reported quantitation limit
 J - Result is estimated
 B - Compound or analyte was positively detected in sample and in associated blank
 / - Laboratory data qualifier
 _ - Data validation qualifier

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

System	Date	Temp (F)	Flow (scfm)
Therm-Ox 2	06/10/09	74	1,038

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.7
SBPA and Off-Site ISVE System Results
for Method TO-15 (VOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/13/09			
		SBPA ISVE		Off-Site ISVE	
1,1,1-Trichloroethane	ppbv	11,000		13,000	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U
1,1,2-Trichloroethane	ppbv	ND	U	49	
1,1-Dichloroethane	ppbv	890		1,100	
1,1-Dichloroethene	ppbv	31		29	J
1,2-Dichloroethane	ppbv	86		210	
1,2-Dichloropropane	ppbv	ND	U	ND	U
2-Butanone (Methyl Ethyl Ketone)	ppbv	97		3,000	
2-Hexanone	ppbv	ND	U	ND	U
4-Methyl-2-pentanone	ppbv	280		1,100	
Acetone	ppbv	200		2,800	
Benzene	ppbv	710		3,400	
Bromodichloromethane	ppbv	ND	U	ND	U
Bromoform	ppbv	ND	U	ND	U
Bromomethane	ppbv	ND	U	ND	U
Carbon Disulfide	ppbv	ND	U	ND	U
Carbon Tetrachloride	ppbv	ND	U	ND	U
Chlorobenzene	ppbv	ND	U	ND	U
Chloroethane	ppbv	82	/J	64	/J
Chloroform	ppbv	990		1,100	
Chloromethane	ppbv	ND	U	ND	U
cis-1,2-Dichloroethene	ppbv	3,500	U	1,000	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U
Dibromochloromethane	ppbv	ND	U	ND	U
Ethyl Benzene	ppbv	1,100		3,200	
m,p-Xylene	ppbv	5,300		20,000	
Methylene Chloride	ppbv	2,200	/B	11,000	/B
o-Xylene	ppbv	2,700		5,300	
Styrene	ppbv	20	J	93	
Tetrachloroethene	ppbv	5,300		5,300	
Toluene	ppbv	4,900		33,000	
trans-1,2-Dichloroethene	ppbv	24	J	ND	U
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U
Trichloroethene	ppbv	3,300		5,100	
Vinyl Chloride	ppbv	260		52	
Total	ppbv	42,970		109,897	
Total	lb/hr	0.759		2.750	

Notes:

NC - Not calculated
 ppbv - parts per billion volume
 lb/hr - pounds per hour

Qualifiers:

J - Result is estimated
 U - Below reported quantitation limit
 B - Compound or analyte was positively detected in sample and in associated blank.
 /J - Laboratory data qualifier
 /_ - Data validation qualifier

System	Date	Temp (F)	Flow (scfm)
On-site	04/13/09	90	946
Off-site	04/13/09	59	1,522

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.8
SBPA and Off-Site ISVE System Results
for Method TO-15 (VOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09			
		SBPA ISVE		Off-Site ISVE	
1,1,1-Trichloroethane	ppbv	8,800		8,100	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U
1,1,2-Trichloroethane	ppbv	ND	U	58	
1,1-Dichloroethane	ppbv	800		1,500	
1,1-Dichloroethene	ppbv	23	J	35	
1,2-Dichloroethane	ppbv	85		210	
1,2-Dichloropropane	ppbv	ND	U	65	
2-Butanone (Methyl Ethyl Ketone)	ppbv	98	J	2,800	
2-Hexanone	ppbv	ND	U	ND	U
4-Methyl-2-pentanone	ppbv	340		1,700	
Acetone	ppbv	200	/U	2,200	/U
Benzene	ppbv	530		3,400	
Bromodichloromethane	ppbv	ND	U	ND	U
Bromoform	ppbv	ND	U	ND	U
Bromomethane	ppbv	ND	U	ND	U
Carbon Disulfide	ppbv	ND	U	ND	U
Carbon Tetrachloride	ppbv	ND	U	ND	U
Chlorobenzene	ppbv	ND	U	ND	U
Chloroethane	ppbv	28	J	78	
Chloroform	ppbv	1,100		1,100	
Chloromethane	ppbv	ND	U	ND	U
cis-1,2-Dichloroethene	ppbv	2,800		1,100	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U
Dibromochloromethane	ppbv	ND	U	ND	U
Ethyl Benzene	ppbv	1,200		3,000	
m,p-Xylene	ppbv	5,900		12,000	
Methylene Chloride	ppbv	2,200		6,800	
o-Xylene	ppbv	2,700		5,200	
Styrene	ppbv	25	J	150	
Tetrachloroethene	ppbv	5,100		5,400	
Toluene	ppbv	5,500		20,000	
trans-1,2-Dichloroethene	ppbv	23	J	ND	U
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U
Trichloroethene	ppbv	3,400		4,800	
Vinyl Chloride	ppbv	95		86	
Total	ppbv	40,947		79,782	
Total	lb/hr	0.717		1.962	

Notes:

NC - Not calculated
 ppbv - parts per billion volume
 lb/hr - pounds per hour

Qualifiers:

J - Result is estimated
 U - Below reported quantitation limit
 / - Laboratory data qualifier
 / - Data validation qualifier

System	Date	Temp (F)	Flow (scfm)
On-site	05/12/09	102	945
Off-site	05/12/09	65	1,479

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.9
SBPA and Off-Site ISVE System Results
for Method TO-15 (VOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09			
		SBPA ISVE	Off-Site ISVE		
1,1,1-Trichloroethane	ppbv	7,200		8,900	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U
1,1,2-Trichloroethane	ppbv	23	J	82	
1,1-Dichloroethane	ppbv	960		1,700	
1,1-Dichloroethene	ppbv	28	J	34	
1,2-Dichloroethane	ppbv	120		290	
1,2-Dichloropropane	ppbv	68		75	
2-Butanone (Methyl Ethyl Ketone)	ppbv	410		1,800	
2-Hexanone	ppbv	ND	U	ND	U
4-Methyl-2-pentanone	ppbv	430		1,400	
Acetone	ppbv	790	/J	2,000	/J
Benzene	ppbv	1,400		3,900	
Bromodichloromethane	ppbv	ND	U	32	
Bromoform	ppbv	ND	U	ND	U
Bromomethane	ppbv	ND	U	ND	U
Carbon Disulfide	ppbv	ND	U	ND	U
Carbon Tetrachloride	ppbv	ND	U	ND	U
Chlorobenzene	ppbv	ND	U	ND	U
Chloroethane	ppbv	29	J	48	
Chloroform	ppbv	1,500		1,000	
Chloromethane	ppbv	ND	U	20	J
cis-1,2-Dichloroethene	ppbv	2,600		970	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U
Dibromochloromethane	ppbv	ND	U	ND	U
Ethyl Benzene	ppbv	1,700		3,300	
m,p-Xylene	ppbv	7,000		14,000	
Methylene Chloride	ppbv	2,600	/B	9,500	/B
o-Xylene	ppbv	3,100		5,600	
Styrene	ppbv	43		170	
Tetrachloroethene	ppbv	6,200		6,300	
Toluene	ppbv	9,000		36,000	
trans-1,2-Dichloroethene	ppbv	23	J	ND	U
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U
Trichloroethene	ppbv	4,600		5,700	
Vinyl Chloride	ppbv	140		130	
Total	ppbv	49,964		102,951	
Total	lb/hr	0.786		1.477	

Notes:

NC - Not calculated
 ppbv - parts per billion volume
 lb/hr - pounds per hour

Qualifiers:

J - Result is estimated
 U - Below reported quantitation limit
 B - Compound or analyte was positively detected in sample and in associated blank.
 /J - Laboratory data qualifier
 /_ - Data validation qualifier

System	Date	Temp (F)	Flow (scfm)
On-site	06/10/09	109	873
Off-site	06/10/09	71	873

Temperatures and flow rates reported correspond to instantaneous readings.

Table 3.10
Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/23/09								
		Therm-Ox 1				Destruction Efficiency				
		Influent		Influent Dup		Effluent		Low	High	Average
1,2,4-Trichlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
1,2-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
1,3-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
1,4-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Methylnaphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
3/4-Methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
4-Bromophenyl phenyl ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chlorophenyl phenyl ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benz[a]anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benz[a]pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benz[b]fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benz[g,h,i]perylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benz[k]fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-chloroethoxy)methane	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-chloroethyl)ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-chloroisopropyl)ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-ethylhexyl)phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Butyl benzyl phthalate	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
Carbazole	µg	ND	U	ND	U	ND	U	NC	NC	NC
Chrysene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenz[a,h]anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	NC	NC	NC
Diethyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dimethyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Di-n-butyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Di-n-octyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluorene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC	NC	NC

Table 3.10
Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/23/09								
		Therm-Ox 1				Destruction Efficiency				
		Influent		Influent Dup		Effluent		Low	High	Average
Indeno[1,2,3cd]pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	ND	U	ND	U	ND	U	NC	NC	NC
Naphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Nitrobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodi-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Total	µg	0.00		0.00		0.00		NC	NC	NC

Notes:

µg - Microgram

NC - Not calculated

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

Qualifiers:

U - below reported quantitation limit

UJ - Indicates the compound or analyte was analyzed for but not detected.

The sample detection limit is an estimated value.

/_ - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.11
Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09								
		Therm-Ox 1				Effluent		Low	High	Average
		Influent		Influent Dup		Effluent				
1,2,4-Trichlorobenzene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
1,2-Dichlorobenzene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
1,3-Dichlorobenzene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
1,4-Dichlorobenzene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
2-Chloronaphthalene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Methylnaphthalene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
2-Methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
3/4-Methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Bromophenyl phenyl ether	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
4-Chlorophenyl phenyl ether	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Anthracene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Benzo[a]anthracene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Benzo[a]pyrene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Benzo[b]fluoranthene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Benzo[g,h,i]perylene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Benzo[k]fluoranthene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Bis(2-chloroethoxy)methane	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Bis(2-chloroethyl)ether	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Bis(2-chloroisopropyl)ether	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Bis(2-ethylhexyl)phthalate	µg	ND	U/UJ	1.2	J	1.6	J	NC	NC	NC
Butyl benzyl phthalate	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Carbazole	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Chrysene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Dibenz[a,h]anthracene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Diethyl phthalate	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Dimethyl phthalate	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Di-n-butyl phthalate	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Di-n-octyl phthalate	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Fluorene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC

Table 3.11
Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09								
		Therm-Ox 1				Destruction Efficiency				
		Influent		Influent Dup		Effluent		Low	High	Average
Indeno[1,2,3cd]pyrene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Isophorone	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Naphthalene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Nitrobenzene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
N-Nitrosodi-n-propylamine	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrone	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Phenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pyrene	µg	ND	U/UJ	ND	U	ND	U	NC	NC	NC
Total	µg	0.00		1.20		1.60		NC	NC	NC

Notes:

µg - Microgram

NC - Not calculated

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

Qualifiers:

J - Result is estimated

U - below reported quantitation limit

UJ - Indicates the compound or analyte was analyzed for but not detected.

The sample detection limit is an estimated value.

/ - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.12
Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09						
		Therm-Ox 1				Destruction Efficiency		
		Influent	Influent Dup	Effluent		Low	High	Average
1,2,4-Trichlorobenzene	µg	ND	U	ND	U	ND	U	NC
1,2-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC
1,3-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC
1,4-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC
2-Methylnaphthalene	µg	ND	U	ND	U	ND	U	NC
2-Methylphenol	µg	ND	U	ND	U	ND	U	NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC
3,3'-Dichlorobenzidine	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC
3/4-Methylphenol	µg	ND	U	ND	U	ND	U	NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	NC
4-Bromophenyl phenyl ether	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC
4-Chlorophenyl phenyl ether	µg	ND	U	ND	U	ND	U	NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC
4-Nitrophenol	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC
Acenaphthene	µg	ND	U	ND	U	ND	U	NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC
Anthracene	µg	ND	U	ND	U	ND	U	NC
Benzo[a]anthracene	µg	ND	U/UJ	ND	U	ND	U/UJ	NC
Benzo[a]pyrene	µg	ND	U	ND	U/UJ	ND	U	NC
Benzo[b]fluoranthene	µg	ND	U	ND	U	ND	U	NC
Benzo[g,h,i]perylene	µg	ND	U	ND	U	ND	U	NC
Benzo[k]fluoranthene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC
Bis(2-chloroethoxy)methane	µg	ND	U	ND	U	ND	U	NC
Bis(2-chloroethyl)ether	µg	ND	U	ND	U	ND	U	NC
Bis(2-chloroisopropyl)ether	µg	ND	U	ND	U	ND	U	NC
Bis(2-ethylhexyl)phthalate	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC
Butyl benzyl phthalate	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC
Carbazole	µg	ND	U	ND	U	ND	U	NC
Chrysene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC
Dibenz[a,h]anthracene	µg	ND	U	ND	U	ND	U	NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	NC
Diethyl phthalate	µg	ND	U	ND	U	ND	U	NC
Dimethyl phthalate	µg	ND	U	ND	U	ND	U	NC
Di-n-butyl phthalate	µg	ND	U	ND	U	ND	U	NC
Di-n-octyl phthalate	µg	ND	U	ND	U/UJ	ND	U/UJ	NC
Fluoranthene	µg	ND	U	ND	U	ND	U	NC
Fluorene	µg	ND	U	ND	U	ND	U	NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC
Hexachlorobutadiene	µg	ND	U	ND	U	ND	U	NC
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC

Table 3.12
Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09								
		Therm-Ox 1				Destruction Efficiency				
		Influent		Influent Dup		Effluent		Low	High	Average
Indeno[1,2,3cd]pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	ND	U	ND	U	ND	U	NC	NC	NC
Naphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Nitrobenzene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
N-Nitrosodi-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthren	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pyrene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
Total	µg	0.00		0.00		0.00		NC	NC	NC

Notes:

µg - Microgram

NC - Not calculated

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

Qualifiers:

U - below reported quantitation limit

UJ - Indicates the compound or analyte was analyzed for but not detected.

The sample detection limit is an estimated value.

/ - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.13
Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/23/09						Destruction Efficiency		
		Therm-Ox 2						Low	High	Average
		Influent	Influent Dup	Effluent						
1,2,4-Trichlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
1,2-Dichlorobenzene	µg	2.7	J	1.8	J	ND	U	NC	NC	NC
1,3-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
1,4-Dichlorobenzene	µg	0.94	J	1.1	J	ND	U	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Methylnaphthalene	µg	2.4	J	1	J	ND	U	NC	NC	NC
2-Methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
3/4-Methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
4-Bromophenyl phenyl ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chlorophenyl phenyl ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo[a]anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo[a]pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo[b]fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo[g,h,i]perylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo[k]fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-chloroethoxy)methane	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-chloroethyl)ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-chloroisopropyl)ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
Bis(2-ethylhexyl)phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Butyl benzyl phthalate	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC
Carbazole	µg	ND	U	ND	U	ND	U	NC	NC	NC
Chrysene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenzo[a,h]anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	NC	NC	NC
Diethyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dimethyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Di-n-butyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Di-n-octyl phthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluorene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC	NC	NC

Table 3.13
Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/23/09								
		Therm-Ox 2						Destruction Efficiency		
		Influent		Influent Dup		Effluent		Low	High	Average
Indeno[1,2,3cd]pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	5.1	J	2.7	J	ND	U	NC	NC	NC
Naphthalene	µg	9.3		4.6		ND	U	100.00%	100.00%	100.00%
Nitrobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodi-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	1.8	Jb/UB	ND	U	1.4	Jb/UB	NC	NC	NC
Pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Total	µg	22.24		11.20		1.40		87.50%	93.71%	90.60%

Notes:

µg - Microgram

NC - Not calculated

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

Qualifiers:

J - Result is estimated

U - below reported quantitation limit

Jb - Detected in the associated Method Blank at a concentration between

the Reporting Limit and Method Detection Limit.

UJ - Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

UB - Compound or analyte is not detected at or above the indicated concentration due to blank contamination.

/ - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.14
Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09					
		Therm-Ox 2				Destruction Efficiency	
		Influent	Influent Dup	Effluent		Low	High
1,2,4-Trichlorobenzene	µg	ND	U	ND	U	ND	U
1,2-Dichlorobenzene	µg	ND	U	1.4	J	ND	U
1,3-Dichlorobenzene	µg	ND	U	ND	U	ND	U
1,4-Dichlorobenzene	µg	ND	U	ND	U	ND	U
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U
2-Chlorophenol	µg	ND	U	ND	U	ND	U
2-Methylnaphthalene	µg	ND	U	ND	U	ND	U
2-Methylphenol	µg	ND	U	ND	U	ND	U
2-Nitroaniline	µg	ND	U	ND	U	ND	U
2-Nitrophenol	µg	ND	U	ND	U	ND	U
3,3'-Dichlorobenzidine	µg	ND	U	ND	U	ND	U
3/4-Methylphenol	µg	ND	U	ND	U	ND	U
3-Nitroaniline	µg	ND	U	ND	U	ND	U
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U
4-Bromophenyl phenyl ether	µg	ND	U	ND	U	ND	U
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U
4-Chloroaniline	µg	ND	U	ND	U	ND	U
4-Chlorophenyl phenyl ether	µg	ND	U	ND	U	ND	U
4-Nitroaniline	µg	ND	U	ND	U	ND	U
4-Nitrophenol	µg	ND	U	ND	U	ND	U
Acenaphthene	µg	ND	U	ND	U	ND	U
Acenaphthylene	µg	ND	U	ND	U	ND	U
Anthracene	µg	ND	U	ND	U	ND	U
Benzo[a]anthracene	µg	ND	U	ND	U	ND	U
Benzo[a]pyrene	µg	ND	U	ND	U	ND	U
Benzo[b]fluoranthene	µg	ND	U	ND	U	ND	U
Benzo[g,h,i]perylene	µg	ND	U	ND	U	ND	U
Benzo[k]fluoranthene	µg	ND	U	ND	U	ND	U
Bis(2-chloroethoxy)methane	µg	ND	U	ND	U	ND	U
Bis(2-chloroethyl)ether	µg	ND	U	ND	U	ND	U
Bis(2-chloroisopropyl)ether	µg	ND	U	ND	U	ND	U
Bis(2-ethylhexyl)phthalate	µg	1.8	J	1.9	J	1.4	J
Butyl benzyl phthalate	µg	ND	U	ND	U	ND	U
Carbazole	µg	ND	U	ND	U	ND	U
Chrysene	µg	ND	U	ND	U	ND	U
Dibenz[a,h]anthracene	µg	ND	U	ND	U	ND	U
Dibenzofuran	µg	ND	U	ND	U	ND	U
Diethyl phthalate	µg	ND	U	ND	U	ND	U
Dimethyl phthalate	µg	ND	U	ND	U	ND	U
Di-n-butyl phthalate	µg	ND	U	ND	U	ND	U
Di-n-octyl phthalate	µg	ND	U	ND	U	ND	U
Fluoranthene	µg	ND	U	ND	U	ND	U
Fluorene	µg	ND	U	ND	U	ND	U
Hexachlorobenzene	µg	ND	U	ND	U	ND	U
Hexachlorobutadiene	µg	ND	U	ND	U	ND	U
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U
Hexachloroethane	µg	ND	U	ND	U	ND	U

Table 3.14
Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09						Destruction Efficiency		
		Therm-Ox 2						Low	High	Average
		Influent	Influent Dup	Effluent						
Indeno[1,2,3cd]pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	ND	U	1.6	J	ND	U	NC	NC	NC
Naphthalene	µg	1.3		2.5		ND	U	100.00%	100.00%	100.00%
Nitrobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodi-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Total	µg	3.10		7.40		1.40		54.84%	81.08%	67.96%

Notes:

µg - Microgram

NC - Not calculated

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

Qualifiers:

J - Result is estimated

U - below reported quantitation limit

_J - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.15
Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09						
		Therm-Ox 2				Destruction Efficiency		
		Influent	Influent Dup	Effluent		Low	High	Average
1,2,4-Trichlorobenzene	µg	ND	U	ND	U	ND	U	NC NC NC
1,2-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC NC NC
1,3-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC NC NC
1,4-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC NC NC
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC NC NC
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC NC NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC NC NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC NC NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC NC NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC
2-Methylnaphthalene	µg	ND	U	ND	U	ND	U	NC NC NC
2-Methylphenol	µg	ND	U	ND	U	ND	U	NC NC NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC NC NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC NC NC
3,3'-Dichlorobenzidine	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
3/4-Methylphenol	µg	ND	U	ND	U	ND	U	NC NC NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC NC NC
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	NC NC NC
4-Bromophenyl phenyl ether	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC NC NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC NC NC
4-Chlorophenyl phenyl ether	µg	ND	U	ND	U	ND	U	NC NC NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC NC NC
4-Nitrophenol	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
Acenaphthene	µg	ND	U	ND	U	ND	U	NC NC NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC NC NC
Anthracene	µg	ND	U	ND	U	ND	U	NC NC NC
Benzo[a]anthracene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
Benzo[a]pyrene	µg	ND	U	ND	U	ND	U	NC NC NC
Benzo[b]fluoranthene	µg	ND	U	ND	U	ND	U	NC NC NC
Benzo[g,h,i]perylene	µg	ND	U	ND	U	ND	U	NC NC NC
Benzo[k]fluoranthene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
Bis(2-chloroethoxy)methane	µg	ND	U	ND	U	ND	U	NC NC NC
Bis(2-chloroethyl)ether	µg	ND	U	ND	U	ND	U	NC NC NC
Bis(2-chloroisopropyl)ether	µg	ND	U	ND	U	ND	U	NC NC NC
Bis(2-ethylhexyl)phthalate	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
Butyl benzyl phthalate	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
Carbazole	µg	ND	U	ND	U	ND	U	NC NC NC
Chrysene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC NC NC
Dibenz[a,h]anthracene	µg	ND	U	ND	U	ND	U	NC NC NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	NC NC NC
Diethyl phthalate	µg	ND	U	ND	U	ND	U	NC NC NC
Dimethyl phthalate	µg	ND	U	ND	U	ND	U	NC NC NC
Di-n-butyl phthalate	µg	ND	U/UJ	ND	U	ND	U	NC NC NC
Di-n-octyl phthalate	µg	ND	U	ND	U/UJ	ND	U/UJ	NC NC NC
Fluoranthene	µg	ND	U	ND	U	ND	U	NC NC NC
Fluorene	µg	ND	U	ND	U	ND	U	NC NC NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC NC NC
Hexachlorobutadiene	µg	ND	U	ND	U	ND	U	NC NC NC
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	NC NC NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC NC NC

Table 3.15
Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09							Destruction Efficiency		
		Therm-Ox 2						Low	High	Average	
		Influent		Influent Dup		Effluent					
Indeno[1,2,3cd]pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC	
Isophorone	µg	ND	U	ND	U	ND	U	NC	NC	NC	
Naphthalene	µg	1.1		ND	U	ND	U	NC	NC	NC	
Nitrobenzene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC	
N-Nitrosodi-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC	
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC	
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	
Phenanthrene	µg	ND	U	ND	U	ND	U	NC	NC	NC	
Phenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	
Pyrene	µg	ND	U/UJ	ND	U/UJ	ND	U/UJ	NC	NC	NC	
Total	µg	1.10		0.00		0.00		NC	NC	NC	

Notes:

µg - Microgram

NC - Not calculated

Destruction efficiencies were not calculated if either the influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Total destruction efficiencies that include the estimated results of any individual compound will be considered an estimated value.

Qualifiers:

U - below reported quantitation limit

UJ - Indicates the compound or analyte was analyzed for but not detected.

The sample detection limit is an estimated value.

/ - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.16
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/23/09			
		SBPA ISVE	Off-Site ISVE		
1,2,4-Trichlorobenzene	µg	ND	U/UJ	ND	U
1,2-Dichlorobenzene	µg	1.2	J/J	ND	U
1,3-Dichlorobenzene	µg	ND	U/UJ	ND	U
1,4-Dichlorobenzene	µg	ND	U/UJ	ND	U
2,4,5-Trichlorophenol	µg	ND	U	ND	U
2,4,6-Trichlorophenol	µg	ND	U	ND	U
2,4-Dichlorophenol	µg	ND	U	ND	U
2,4-Dimethylphenol	µg	ND	U	ND	U
2,4-Dinitrophenol	µg	ND	U/UJ	ND	U/UJ
2,4-Dinitrotoluene	µg	ND	U/UJ	ND	U
2,6-Dinitrotoluene	µg	ND	U/UJ	ND	U
2-Chloronaphthalene	µg	ND	U/UJ	ND	U
2-Chlorophenol	µg	ND	U	ND	U
2-Methylnaphthalene	µg	ND	U/UJ	ND	U
2-Methylphenol	µg	ND	U	ND	U
2-Nitroaniline	µg	ND	U/UJ	ND	U
2-Nitrophenol	µg	ND	U	ND	U
3,3'-Dichlorobenzidine	µg	ND	U/UJ	ND	U/UJ
3/4-Methylphenol	µg	ND	U	ND	U
3-Nitroaniline	µg	ND	U/UJ	ND	U
4,6-Dinitro-2-methylphenol	µg	ND	U/UJ	ND	U/UJ
4-Bromophenyl phenyl ether	µg	ND	U/UJ	ND	U
4-Chloro-3-methylphenol	µg	ND	U	ND	U
4-Chloroaniline	µg	ND	U/UJ	ND	U
4-Chlorophenyl phenyl ether	µg	ND	U/UJ	ND	U
4-Nitroaniline	µg	ND	U/UJ	ND	U
4-Nitrophenol	µg	ND	U	ND	U
Acenaphthene	µg	ND	U/UJ	ND	U
Acenaphthylene	µg	ND	U/UJ	ND	U
Anthracene	µg	ND	U/UJ	ND	U
Benz[a]anthracene	µg	ND	U/UJ	ND	U
Benz[a]pyrene	µg	ND	U/UJ	ND	U
Benz[b]fluoranthene	µg	ND	U/UJ	ND	U
Benz[g,h,i]perylene	µg	ND	U/UJ	ND	U
Benz[k]fluoranthene	µg	ND	U/UJ	ND	U
Bis(2-chloroethoxy)methane	µg	ND	U/UJ	ND	U
Bis(2-chloroethyl)ether	µg	ND	U/UJ	ND	U
Bis(2-chloroisopropyl)ether	µg	ND	U/UJ	ND	U
Bis(2-ethylhexyl)phthalate	µg	ND	U/UJ	ND	U
Butyl benzyl phthalate	µg	ND	U/UJ	ND	U/UJ
Carbazole	µg	ND	U/UJ	ND	U
Chrysene	µg	ND	U/UJ	ND	U
Dibenz[a,h]anthracene	µg	ND	U/UJ	ND	U
Dibenzofuran	µg	ND	U/UJ	ND	U
Diethyl phthalate	µg	ND	U/UJ	ND	U
Dimethyl phthalate	µg	ND	U/UJ	ND	U
Di-n-butyl phthalate	µg	ND	U/UJ	ND	U
Di-n-octyl phthalate	µg	ND	U/UJ	ND	U
Fluoranthene	µg	ND	U/UJ	ND	U
Fluorene	µg	ND	U/UJ	ND	U
Hexachlorobenzene	µg	ND	U/UJ	ND	U
Hexachlorobutadiene	µg	ND	U/UJ	ND	U
Hexachlorocyclopentadiene	µg	ND	U/UJ	ND	U
Hexachloroethane	µg	ND	U/UJ	ND	U

Table 3.16
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - April 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	04/23/09			
		SBPA ISVE		Off-Site ISVE	
Indeno[1,2,3cd]pyrene	µg	ND	U/UJ	ND	U
Isophorone	µg	ND	U/UJ	ND	U
Naphthalene	µg	ND	U/UJ	2.0	
Nitrobenzene	µg	ND	U/UJ	ND	U
N-Nitrosodi-n-propylamine	µg	ND	U/UJ	ND	U
N-Nitrosodiphenylamine	µg	ND	U/UJ	ND	U
Pentachlorophenol	µg	ND	U	ND	U
Phenanthrene	µg	ND	U/UJ	ND	U
Phenol	µg	ND	U	ND	U
Pyrene	µg	ND	U/UJ	ND	U
Total	µg	1.20		2.00	

Notes:

µg - Microgram

NC - Not calculated

Qualifiers:

J - Result is estimated

U - below reported quantitation limit

UJ - Indicates the compound or analyte was analyzed for but not detected.

The sample detection limit is an estimated value.

/ - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.17
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09		
		SBPA ISVE	Off-Site ISVE	
1,2,4-Trichlorobenzene	µg	ND	U	ND U
1,2-Dichlorobenzene	µg	1.2	J	0.96 J
1,3-Dichlorobenzene	µg	ND	U	ND U
1,4-Dichlorobenzene	µg	ND	U	ND U
2,4,5-Trichlorophenol	µg	ND	U	ND U
2,4,6-Trichlorophenol	µg	ND	U	ND U
2,4-Dichlorophenol	µg	ND	U	ND U
2,4-Dimethylphenol	µg	ND	U	ND U
2,4-Dinitrophenol	µg	ND	U	ND U
2,4-Dinitrotoluene	µg	ND	U	ND U
2,6-Dinitrotoluene	µg	ND	U	ND U
2-Chloronaphthalene	µg	ND	U	ND U
2-Chlorophenol	µg	ND	U	ND U
2-Methylnaphthalene	µg	ND	U	ND U
2-Methylphenol	µg	ND	U	ND U
2-Nitroaniline	µg	ND	U	ND U
2-Nitrophenol	µg	ND	U	ND U
3,3'-Dichlorobenzidine	µg	ND	U	ND U
3/4-Methylphenol	µg	ND	U	ND U
3-Nitroaniline	µg	ND	U	ND U
4,6-Dinitro-2-methylphenol	µg	ND	U	ND U
4-Bromophenyl phenyl ether	µg	ND	U	ND U
4-Chloro-3-methylphenol	µg	ND	U	ND U
4-Chloroaniline	µg	ND	U	ND U
4-Chlorophenyl phenyl ether	µg	ND	U	ND U
4-Nitroaniline	µg	ND	U	ND U
4-Nitrophenol	µg	ND	U	ND U
Acenaphthene	µg	ND	U	ND U
Acenaphthylene	µg	ND	U	ND U
Anthracene	µg	ND	U	ND U
Benzo[a]anthracene	µg	ND	U	ND U
Benzo[a]pyrene	µg	ND	U	ND U
Benzo[b]fluoranthene	µg	ND	U	ND U
Benzo[g,h,i]perylene	µg	ND	U	ND U
Benzo[k]fluoranthene	µg	ND	U	ND U
Bis(2-chloroethoxy)methane	µg	ND	U	ND U
Bis(2-chloroethyl)ether	µg	ND	U	ND U
Bis(2-chloroisopropyl)ether	µg	ND	U	ND U
Bis(2-ethylhexyl)phthalate	µg	1.1	J	1.9 J
Butyl benzyl phthalate	µg	ND	U	ND U
Carbazole	µg	ND	U	ND U
Chrysene	µg	ND	U	ND U
Dibenz[a,h]anthracene	µg	ND	U	ND U
Dibenzofuran	µg	ND	U	ND U
Diethyl phthalate	µg	ND	U	ND U
Dimethyl phthalate	µg	ND	U	ND U
Di-n-butyl phthalate	µg	ND	U	ND U
Di-n-octyl phthalate	µg	ND	U	ND U
Fluoranthene	µg	ND	U	ND U
Fluorene	µg	ND	U	ND U
Hexachlorobenzene	µg	ND	U	ND U
Hexachlorobutadiene	µg	ND	U	ND U
Hexachlorocyclopentadiene	µg	ND	U	ND U
Hexachloroethane	µg	ND	U	ND U

Table 3.17
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - May 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	05/12/09			
		SBPA ISVE	Off-Site ISVE		
Indeno[1,2,3cd]pyrene	µg	ND	U	ND	U
Isophorone	µg	ND	U	1.1	J
Naphthalene	µg	ND	U	2.2	
Nitrobenzene	µg	ND	U	ND	U
N-Nitrosodi-n-propylamine	µg	ND	U	ND	U
N-Nitrosodiphenylamine	µg	ND	U	ND	U
Pentachlorophenol	µg	ND	U	ND	U
Phenanthrene	µg	ND	U	ND	U
Phenol	µg	ND	U	ND	U
Pyrene	µg	ND	U	0.93	J
Total	µg	2.30		7.09	

Notes:

µg - Microgram

NC - Not calculated

Qualifiers:

J - Result is estimated

U - below reported quantitation limit

_J - Laboratory data qualifier

_U - Data validation qualifier

Table 3.18
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09			
		SBPA ISVE	Off-Site ISVE		
1,2,4-Trichlorobenzene	µg	ND	U	ND	U
1,2-Dichlorobenzene	µg	ND	U	ND	U
1,3-Dichlorobenzene	µg	ND	U	ND	U
1,4-Dichlorobenzene	µg	ND	U	ND	U
2,4,5-Trichlorophenol	µg	ND	U	ND	U
2,4,6-Trichlorophenol	µg	ND	U	ND	U
2,4-Dichlorophenol	µg	ND	U	ND	U
2,4-Dimethylphenol	µg	ND	U	ND	U
2,4-Dinitrophenol	µg	ND	U	ND	U
2,4-Dinitrotoluene	µg	ND	U	ND	U
2,6-Dinitrotoluene	µg	ND	U	ND	U
2-Chloronaphthalene	µg	ND	U	ND	U
2-Chlorophenol	µg	ND	U	ND	U
2-Methylnaphthalene	µg	ND	U	ND	U
2-Methylphenol	µg	ND	U	ND	U
2-Nitroaniline	µg	ND	U	ND	U
2-Nitrophenol	µg	ND	U	ND	U
3,3'-Dichlorobenzidine	µg	ND	U/UJ	ND	U/UJ
3/4-Methylphenol	µg	ND	U	ND	U
3-Nitroaniline	µg	ND	U	ND	U
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U
4-Bromophenyl phenyl ether	µg	ND	U/UJ	ND	U/UJ
4-Chloro-3-methylphenol	µg	ND	U	ND	U
4-Chloroaniline	µg	ND	U	ND	U
4-Chlorophenyl phenyl ether	µg	ND	U	ND	U
4-Nitroaniline	µg	ND	U	ND	U
4-Nitrophenol	µg	ND	U/UJ	ND	U/UJ
Acenaphthene	µg	ND	U	ND	U
Acenaphthylene	µg	ND	U	ND	U
Anthracene	µg	ND	U	ND	U
Benzo[a]anthracene	µg	ND	U/UJ	ND	U/UJ
Benzo[a]pyrene	µg	ND	U	ND	U
Benzo[b]fluoranthene	µg	ND	U	ND	U
Benzo[g,h,i]perylene	µg	ND	U	ND	U
Benzo[k]fluoranthene	µg	ND	U/UJ	ND	U/UJ
Bis(2-chloroethoxy)methane	µg	ND	U	ND	U
Bis(2-chloroethyl)ether	µg	ND	U	ND	U
Bis(2-chloroisopropyl)ether	µg	ND	U	ND	U
Bis(2-ethylhexyl)phthalate	µg	ND	U/UJ	ND	U/UJ
Butyl benzyl phthalate	µg	ND	U/UJ	ND	U/UJ
Carbazole	µg	ND	U	ND	U
Chrysene	µg	ND	U/UJ	ND	U/UJ
Dibenz[a,h]anthracene	µg	ND	U	ND	U
Dibenzofuran	µg	ND	U	ND	U
Diethyl phthalate	µg	ND	U	ND	U
Dimethyl phthalate	µg	ND	U	ND	U
Di-n-butyl phthalate	µg	ND	U	ND	U
Di-n-octyl phthalate	µg	ND	U/UJ	ND	U/UJ
Fluoranthene	µg	ND	U	ND	U
Fluorene	µg	ND	U	ND	U
Hexachlorobenzene	µg	ND	U	ND	U
Hexachlorobutadiene	µg	ND	U	ND	U
Hexachlorocyclopentadiene	µg	ND	U	ND	U
Hexachloroethane	µg	ND	U	ND	U

Table 3.18
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - June 2009
American Chemical Service
Griffith, Indiana

Compounds	Units	06/10/09			
		SBPA ISVE	Off-Site ISVE		
Indeno[1,2,3cd]pyrene	µg	ND	U	ND	U
Iosphorone	µg	ND	U	ND	U
Naphthalene	µg	ND	U	1.0	
Nitrobenzene	µg	ND	U/UJ	ND	U/UJ
N-Nitrosodi-n-propylamine	µg	ND	U	ND	U
N-Nitrosodiphenylamine	µg	ND	U	ND	U
Pentachlorophenol	µg	ND	U	ND	U
Phenanthrene	µg	ND	U	ND	U
Phenol	µg	ND	U	ND	U
Pyrene	µg	ND	U/UJ	ND	U/UJ
Total	µg	0.00		1.00	

Notes:

µg - Microgram

NC - Not calculated

Qualifiers:

U - below reported quantitation limit

UJ - Indicates the compound or analyte was analyzed for but not detected.

The sample detection limit is an estimated value.

/ - Laboratory data qualifier

/_ - Data validation qualifier

Table 3.19
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac ($\text{" H}_2\text{O}$)	VOCs (ppm)	Comments
SVE-01	4/22/2009	Water	53.0	30	
	5/20/2009	Water	46.0	19	
	6/30/2009	16	52.0	20	
SVE-02	4/22/2009	13	53.0	25	
	5/20/2009	5	46.0	22	
	6/30/2009	16	51.5	20	
SVE-03	4/22/2009	17	53.0	30	
	5/20/2009	9	46.0	7	
	6/30/2009	17	52.0	6	
SVE-04	4/22/2009	10	53.0	30	
	5/20/2009	11	46.0	7	
	6/30/2009	11	52.0	7	
SVE-05	4/22/2009	Water	53.0	30	
	5/20/2009	57	46.0	20	
	6/30/2009	72	51.5	22	
SVE-06	4/22/2009	8	53.0	40	
	5/20/2009	12	46.0	35	
	6/30/2009	11	51.5	25	
SVE-07	4/22/2009	Water	53.0	35	
	5/20/2009	9	46.5	7	
	6/30/2009	Water	52.0	8	
SVE-08	4/22/2009	9	53.0	45	
	5/20/2009	5	46.0	4	
	6/30/2009	13	52.0	6	
SVE-09	4/22/2009	137	52.5	42	
	5/20/2009	126	45.5	5	
	6/30/2009	40	51.5	6	
SVE-10	4/22/2009	Water	53.0	60	
	5/20/2009	Water	46.0	7	
	6/30/2009	55	52.0	5	
SVE-11	4/22/2009	Water	53.0	50	
	5/20/2009	130	45.5	6	
	6/30/2009	178	51.5	5	
SVE-12	4/22/2009	Water	53.0	30	
	5/20/2009	Water	46.0	6	
	6/30/2009	38	51.0	7	
SVE-13	4/22/2009	13	52.0	220	
	5/20/2009	6	44.0	83	
	6/30/2009	25	50.0	600	

Table 3.19
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac ($\text{" H}_2\text{O}$)	VOCs (ppm)	Comments
SVE-14	4/22/2009	8	51.0	110	
	5/20/2009	20	44.5	80	
	6/30/2009	20	49.0	200	
SVE-15	4/22/2009	19	52.0	35	
	5/20/2009	26	45.0	12	
	6/30/2009	16	41.5	50	
SVE-16	4/22/2009	83	48.0	40	
	5/20/2009	105	41.5	20	
	6/30/2009	79	48.0	60	
SVE-17	4/22/2009	Water	51.5	45	
	5/20/2009	Water	45.0	21	
	6/30/2009	Water	49.5	60	
SVE-18	4/22/2009	Water	51.0	70	
	5/20/2009	Water	44.0	62	
	6/30/2009	Water	49.5	100	
SVE-19	4/22/2009	92	51.0	35	
	5/20/2009	90	42.5	13	
	6/30/2009	90	49.0	45	
SVE-20	4/22/2009	Water	51.0	30	
	5/20/2009	Water	44.5	15	
	6/30/2009	Water	50.5	40	
SVE-21	4/22/2009	Water	51.0	35	
	5/20/2009	Water	45.0	16	
	6/30/2009	102	49.0	30	
SVE-22	4/22/2009	49	4.0	105	
	5/20/2009	45	2.5	74	
	6/30/2009	21	2.5	170	
SVE-23	4/22/2009	32	52.0	140	
	5/20/2009	39	45.0	100	
	6/30/2009	21	51.5	250	
SVE-24	4/22/2009	110	51.0	124	
	5/20/2009	3	45.0	95	
	6/30/2009	21	47.0	160	
SVE-25	4/22/2009	Water	51.0	105	
	5/20/2009	Water	44.0	84	
	6/30/2009	53	50.0	120	
SVE-26	4/22/2009	7	51.5	30	
	5/20/2009	11	45.0	24	
	6/30/2009	13	51.5	30	

Table 3.19
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac ($\text{" H}_2\text{O}$)	VOCs (ppm)	Comments
SVE-27	4/22/2009	216	51.0	90	
	5/20/2009	220	44.0	80	
	6/30/2009	22	51.5	125	
SVE-28	4/22/2009	23	51.0	115	
	5/20/2009	24	44.0	101	
	6/30/2009	23	49.5	210	
SVE-29	4/22/2009	Water	51.0	110	
	5/20/2009	Water	45.0	103	
	6/30/2009	Water	48.5	175	
SVE-30	4/22/2009	27	51.5	240	
	5/20/2009	10	44.5	143	
	6/30/2009	310	45.5	470	
SVE-31	4/22/2009	11	51.0	95	
	5/20/2009	2	43.0	41	
	6/30/2009	14	47.0	105	
SVE-32	4/22/2009	11	51.0	92	
	5/20/2009	7	43.0	54	
	6/30/2009	10	50.0	110	
SVE-33	4/22/2009	15	51.0	90	
	5/20/2009	6	43.0	55	
	6/30/2009	8	51.5	125	
SVE-34	4/22/2009	12	52.0	185	
	5/20/2009	10	44.0	107	
	6/30/2009	Water	51.5	350	
SVE-35	4/22/2009	30	51.0	90	
	5/20/2009	40	43.0	60	
	6/30/2009	27	47.0	130	
SVE-36	4/22/2009	13	51.0	225	
	5/20/2009	7	44.0	105	
	6/30/2009	16	50.0	400	
SVE-37	4/22/2009	Water	51.0	105	
	5/20/2009	13	43.0	71	
	6/30/2009	17	50.0	150	
SVE-38	4/22/2009	51	51.0	180	
	5/20/2009	47	44.5	127	
	6/30/2009	123	47.0	370	
SVE-39	4/22/2009	128	30.5	125	
	5/20/2009	118	24.0	86	
	6/30/2009	120	32.5	170	

Table 3.19
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac ($\text{" H}_2\text{O}$)	VOCs (ppm)	Comments
SVE-40	4/22/2009	13	51.5	140	
	5/20/2009	2	44.0	101	
	6/30/2009	13	51.5	290	
SVE-41	4/22/2009	Water	32.0	130	
	5/20/2009	Water	26.5	84	
	6/30/2009	108	30.5	200	
SVE-42	4/22/2009	10	51.0	115	
	5/20/2009	6	44.0	79	
	6/30/2009	14	50.0	240	
K-P Header 1	4/22/2009	-	53.0	25	
	5/20/2009	-	45.0	10	
	6/30/2009	-	52.5	20	
K-P Header 2	4/22/2009	-	52.0	30	
	5/20/2009	-	45.0	13	
	6/30/2009	-	52.0	20	
OFCA Header 1	4/22/2009	-	51.0	30	
	5/20/2009	-	44.0	16	
	6/30/2009	-	50.0	15	
OFCA Header 2	4/22/2009	-	50.5	40	
	5/20/2009	-	43.5	25	
	6/30/2009	-	50.5	30	
OFCA Header 3	4/22/2009	-	51.5	45	
	5/20/2009	-	44.0	25	
	6/30/2009	-	52.5	50	

Notes:

"-" = data not collected

"Water" = water present in vapor stream, preventing data collection

Flow is measured using a VelociCalc 8384 flow meter.

Vacuum pressures are measured with an Extech Manometer Model 407910.

Table 3.20
Off-Site In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Date	KP1 Line Press (psia)	KP1 Flow (scfm)	KP1 Vac (["] H ₂ O)	KP2 Line Press (psia)	KP2 Flow (scfm)	KP2 Vac (["] H ₂ O)	OFCA1 Vac (["] H ₂ O)	OFCA2 Vac (["] H ₂ O)	OFCA3 Vac (["] H ₂ O)	Dilution Flow (cfm)	Blower Inf Line Press (psia)	Blower Inf Flow (scfm)
4/22/2009	12.8	0	53	12.8	0	52	51	50.5	51.5	0	12.6	891
5/20/2009	13.2	370	45	13.2	523	45	44	43.5	44	0	13.0	735
6/30/2009	12.7	0	52.5	12.7	0	52	50	50.5	52.5	0	12.5	796

Date	Blower Inf Vac (["] H ₂ O)	Blower Inf VOC (ppm)	Blower Inf Temp. ([°] F)	Blower Eff Line Press (psia)	Blower Eff Flow (scfm)	Blower Eff Press (["] H ₂ O)	Blower Eff VOC (ppm)	Blower Eff Temp. ([°] F)	Filter Diff Press (["] H ₂ O)	Ambient Temperature ([°] F)	Barometric Pressure (["] Hg)	Humidity (%)
4/22/2009	58.5	-	54	15.5	762	23.5	120	120	9.0	56	29.86	53%
5/20/2009	50	-	63	15.7	763	25.0	44	125	9.0	75	30.18	43%
6/30/2009	58.5	-	72	15.4	749	24.0	110	136	9.0	66	29.65	68%

Notes:

"-" = Data not collected

cfm = Cubic feet per minute

" H₂O = Inches of water

ppm = Parts per million

VOCs = Volatile organic compounds

psia = Pounds per square inch, atmosphere

" Hg = Inches of mercury

[°]F = Degrees Fahrenheit

Table 3.21
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac ($\text{cm H}_2\text{O}$)	VOCs (ppm)	Comments
SVE-43	4/22/2009	14	64.5	80	
	5/20/2009	4	66.5	33	
	6/30/2009	16	64.5	75	
SVE-44	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-45	4/22/2009	12	64.0	70	
	5/20/2009	4	67.0	33	
	6/30/2009	12	64.5	65	
SVE-46	4/22/2009	22	64.5	80	
	5/20/2009	15	66.5	30	
	6/30/2009	12	64.5	70	
SVE-47	4/22/2009	19	64.5	445	
	5/20/2009	18	66.5	246	
	6/30/2009	21	63.5	120	
SVE-48	4/22/2009	8	64.0	435	
	5/20/2009	165	67.0	188	
	6/30/2009	6	63.5	130	
SVE-49	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-50	4/22/2009	15	64.5	115	
	5/20/2009	16	67.0	39	
	6/30/2009	18	65.0	100	
SVE-51	4/22/2009	13	64.0	95	
	5/20/2009	3	67.5	42	
	6/30/2009	14	64.5	90	
SVE-52	4/22/2009	13	64.0	400	
	5/20/2009	2	66.5	220	
	6/30/2009	18	64.0	115	
SVE-53	4/22/2009	65	64.5	365	
	5/20/2009	3	67.0	170	
	6/30/2009	16	64.0	250	
SVE-54	4/22/2009	17	-	-	Air injection well
	5/20/2009	12	-	-	Air injection well
	6/30/2009	16	-	-	Air injection well
SVE-55	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	13	64.0	120	
SVE-56	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-57	4/22/2009	11	64.0	291	
	5/20/2009	41	66.0	176	
	6/30/2009	6	63.5	175	
SVE-58	4/22/2009	12	65.5	135	
	5/20/2009	25	69.0	54	
	6/30/2009	15	64.5	140	

Table 3.21
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac ($\text{"H}_2\text{O}$)	VOCs (ppm)	Comments
SVE-59	4/22/2009	16	-	-	Air injection well
	5/20/2009	11	-	-	Air injection well
	6/30/2009	13	-	-	Air injection well
SVE-60	4/22/2009	11	65.5	200	
	5/20/2009	5	68.0	105	
	6/30/2009	17	64.0	200	
SVE-61	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-62	4/22/2009	9	65.0	147	
	5/20/2009	8	66.5	64	
	6/30/2009	5	64.5	165	
SVE-63	4/22/2009	6	64.0	150	
	5/20/2009	3	66.0	70	
	6/30/2009	5	64.5	200	
SVE-64	4/22/2009	8	65.0	125	
	5/20/2009	3	67.0	60	
	6/30/2009	20	64.5	145	
SVE-65	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	9	65.0	150	
SVE-66	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-67	4/22/2009	30	64.5	190	
	5/20/2009	28	66.5	109	
	6/30/2009	13	63.5	100	
SVE-68	4/22/2009	30	64.0	215	
	5/20/2009	18	66.5	139	
	6/30/2009	18	64.0	120	
SVE-69	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-70	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-71	4/22/2009	12	66.0	220	
	5/20/2009	14	68.0	55	
	6/30/2009	14	64.5	160	
SVE-72	4/22/2009	13	65.5	135	
	5/20/2009	3	68.0	110	
	6/30/2009	15	64.5	160	
SVE-73	4/22/2009	24	65.0	75	
	5/20/2009	18	68.0	107	
	6/30/2009	12	65.0	100	
SVE-74	4/22/2009	15	65.5	100	
	5/20/2009	13	68.0	85	
	6/30/2009	14	65.0	120	

Table 3.21
SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Well ID	Date	Flow (cfm)	Vac ($\text{"H}_2\text{O}$)	VOCs (ppm)	Comments
SVE-75	4/22/2009	Water	64.5	140	
	5/20/2009	Water	67.0	75	
	6/30/2009	13	63.5	70	
SVE-76	4/22/2009	48	64.5	170	
	5/20/2009	28	66.5	90	
	6/30/2009	20	64.0	90	
SVE-77	4/22/2009	33	-	-	Air injection well
	5/20/2009	19	-	-	Air injection well
	6/30/2009	31	-	-	Air injection well
SVE-78	4/22/2009	12	65.0	155	
	5/20/2009	37	67.0	78	
	6/30/2009	7	64.0	75	
SVE-79	4/22/2009	-	-	-	
	5/20/2009	-	-	-	
	6/30/2009	-	-	-	
SVE-80	4/22/2009	20	-	-	Air injection well
	5/20/2009	22	-	-	Air injection well
	6/30/2009	20	-	-	Air injection well
SVE-81	4/22/2009	10	65.5	160	
	5/20/2009	3	68.5	95	
	6/30/2009	13	64.5	200	
SVE-82	4/22/2009	10	65.5	160	
	5/20/2009	3	68.0	50	
	6/30/2009	9	64.5	140	
SVE-83	4/22/2009	14	65.5	91	
	5/20/2009	7	69.0	100	
	6/30/2009	17	64.5	105	
SVE-84	4/22/2009	26	-	-	Air injection well
	5/20/2009	26	-	-	Air injection well
	6/30/2009	3	-	-	Air injection well
SVE-85	4/22/2009	12	65.5	115	
	5/20/2009	4	69.0	55	
	6/30/2009	12	64.5	135	
SVE-86	4/22/2009	11	65.5	75	
	5/20/2009	40	68.0	83	
	6/30/2009	12	64.5	110	
SVE-87	4/22/2009	17	65.5	95	
	5/20/2009	35	68.0	64	
	6/30/2009	14	64.5	120	
SVE-88	4/22/2009	15	65.0	5	
	5/20/2009	2	68.5	110	
	6/30/2009	11	64.5	120	

Notes:

"-" = data not collected

"Water" = water present in vapor stream, preventing data collection

Flow is measured using a VelociCalc 8384 flow meter.

Vacuum pressures are measured with an Extech Manometer Model 407910.

Table 3.22
SBPA In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data
Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Date	North Header			South Header			Dilution Flow (cfm)	Blower Inf Line Press (psia)	Blower Inf Flow (scfm)	Blower Inf Vac (["] H ₂ O)	Blower Inf VOC (ppm)
	Line Press (psia)	Flow (scfm)	Vac (["] H ₂ O)	Line Press (psia)	Flow (scfm)	Vac (["] H ₂ O)					
4/22/2009	12.3	361	64.0	12.3	1020	65.0	0	11.0	1366	100	-
5/20/2009	13.4	924	38.0	13.4	0	40.0	0	11.2	0	100	-
6/30/2009	12.3	509	62.0	12.2	507	64.5	0	11.0	1948	100	-

Date	Blower Inf Temp. ([°] F)	Blower Eff Line Press (psia)	Blower Eff Flow (scfm)	Blower Eff Press (["] H ₂ O)	Blower Eff VOC (ppm)	Blower Eff Temp. ([°] F)	Filter Diff Press (["] H ₂ O)	Ambient Temperature ([°] F)	Barometric Pressure (["] Hg)	Humidity (%)
4/22/2009	53	16.2	1091	43.0	-	130	9.0	44	29.83	75%
5/20/2009	52	16.4	1221	45.0	-	138	10.0	79	30.15	37%
6/30/2009	56	16.2	1065	44.0	-	158	14.0	68	29.65	60%

Notes:

"-" = Data not collected

cfm = Cubic feet per minute

" H₂O = Inches of water

ppm = Parts per million

VOCs = Volatile organic compounds

psia = Pounds per square inch, atmosphere

" Hg = Inches of mercury

[°]F = Degrees Fahrenheit

Table 6.1
Water Table Elevations Across the Barrier Wall and Near the PGCS - Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Upper Aquifer Wells

Well Designation	Reference Points			6/25/2009		Notes	Difference Across Barrier Wall (if applicable) ¹
	East	North	TOIC	Level	Elevation		
MW11	6377	7329	640.47	5.01	635.46		n/a
MW13	5050	7814	634.08	3.14	630.94		n/a
MW37	5395	7976	636.78	4.83	631.95		n/a
MW46	4526	7424	633.32	NM	NM	Could not locate	n/a
MW48	5669	7814	636.36	4.37	631.99		n/a
MW49	5551	7650	637.00	4.79	632.21		n/a

Staff Gauges & Piezometers

Well Designation	Reference Points			6/25/2009		Notes	Difference Across Barrier Wall (if applicable) ¹
	East	North	TOSG	Level	Elevation		
P23	4689	7018	636.18	5.57	630.61		n/a
P25	5131	7510	633.33	2.10	631.23		n/a
P26	4764	7309	634.23	3.68	630.55		n/a
P27	4904	7020	639.70	8.57	631.13		n/a
P28	5883	7486	644.53	10.02	634.51		n/a
P32	5746	7026	642.32	9.67	632.65		n/a
P40	5931	7241	638.77	4.34	634.43		n/a
P41	5663	7377	637.23	3.62	633.61		n/a
P49	5145	6949	638.98	6.90	632.08		n/a
SG13	4819	7209	631.53	4.39	629.92	TOSG = 6.0' mark	n/a

PGCS Piezometer Sets

Well Designation	Reference Points			6/25/2009		Notes	Difference Across Barrier Wall (if applicable) ¹
	East	North	TOC	Level	Elevation		
P81	5577	7581	636.19	4.25	631.94		n/a
P82	5577	7572	635.77	4.19	631.58		n/a
P83	5577	7561.6	635.95	3.42	632.53		n/a
P84	5322	7603	634.35	3.31	631.04		n/a
P85	5326	7594	634.08	2.99	631.09		n/a
P86	5329	7585	634.41	3.26	631.15		n/a
P87	5121	7466	633.88	2.94	630.94		n/a
P88	5130	7460	633.90	3.20	630.70		n/a
P89	5137	7454	634.02	3.20	630.82		n/a
P90	4881	7152	634.45	4.30	630.15		n/a
P91	4889	7145	634.59	4.30	630.29		n/a
P92	4896	7138.1	633.87	3.71	630.16		n/a

Table 6.1
Water Table Elevations Across the Barrier Wall and Near the PGCS - Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

BWES Water Level and Piezometer Pairs

Well Designation	Reference Points			6/25/2009		Notes	Difference Across Barrier Wall (if applicable) ¹
	East	North	TOC	Level	Elevation		
P93R - Outside BW	n/a	n/a	639.05	7.73	631.32	Installed Nov. 2004	0.23
P94R - Inside BW	n/a	n/a	640.99	9.44	631.55	Installed Nov. 2004	
P95 - Outside BW	5146	6532	638.58	6.12	632.46		-8.04
P96 - Inside BW	5156	6537	641.26	16.84	624.42		
P105 - Outside BW	5885	6678	638.86	2.45	636.41		-6.24
P106 - Inside BW	5871	6685	638.10	7.93	630.17		
P107 - Outside BW	5766	7339	637.42	3.28	634.14		-1.49
P108 - Inside BW	5757	7324	638.13	5.48	632.65		
P109 - Outside BW	5740	6387	644.30	8.06	636.24		-8.68
P110 - Inside BW	5705	6382	647.68	20.12	627.56		
P111 - Outside BW	5551	5950	650.03	14.34	635.69		-8.41
P112 - Inside BW	5525	5960	653.36	26.08	627.28		
P113 - Inside BW	5309	5693	657.53	30.27	627.26		-7.64
ORCPZ102 - Outside BW	5331	5612	652.47	17.57	634.90		
P114 - Inside BW	5035	5729	653.69	25.95	627.74		-7.32
P115 - Outside BW	4970	5708	652.50	17.44	635.06		
P116 - Inside BW	5031	6087	646.26	18.81	627.45		-6.82
P117 - Outside BW	5014	6087	643.93	9.66	634.27		
P118 - Inside BW	5402	6539	645.52	18.18	627.34		n/a

Notes:

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TOIC = top of inner casing

TOC = top of casing

TOSG = top of staff gauge

n/a = not applicable

I A positive value indicates that the water level is higher inside the barrier wall. A negative value indicates that the water level is lower inside the barrier wall.

Table 6.2
Water Levels Inside Barrier Wall - Second Quarter 2009
American Chemical Service NPL Site
Griffith, Indiana

Date	On-Site Area					
	Target Level	P-29	P-31	P-32	P-36	P-49
5/8/2009	629.0	630.4	630.9	632.3	627.1	630.2
5/22/2009	629.0	630.4	630.9	632.4	627.7	631.1
5/29/2009	629.0	630.4	630.9	632.4	628.1	631.3
6/11/2009	629.0	630.4	630.9	632.2	628.0	632.4
6/26/2009	629.0	630.4	630.9	632.6	628.8	632.1

Date	Off-Site Area										
	Target Level	P-96	P-110	P-112	P-113	P-114	P-116	P-118	AS-7	AS-8	AS-9
4/22/2009	626.0	NM	629.01	628.87	NM						
5/4/2009	626.0	NM	628.02	627.79	NM						
5/8/2009	626.0	621.6	627.3	637.5	627.9	628.4	627.9	627.2	NM	NM	NM
5/22/2009	626.0	621.2	627.2	627.2	627.3	627.6	627.2	627.0	NM	NM	NM
5/26/2009	626.0	621.6	627.6	625.6	628.4	629.2	628.4	627.2	NM	NM	NM
6/11/2009	626.0	623.2	627.9	627.2	627.2	627.7	627.6	627.3	NM	NM	NM
6/26/2009	626.0	621.7	628.0	627.3	627.2	627.8	627.5	627.4	NM	NM	NM

Notes:

All water level elevations are in feet AMSL.

NM = Not measured

FIGURES

Figure 3.1
VOC Removal Rate
American Chemical Services NPL Site, Griffith, IN

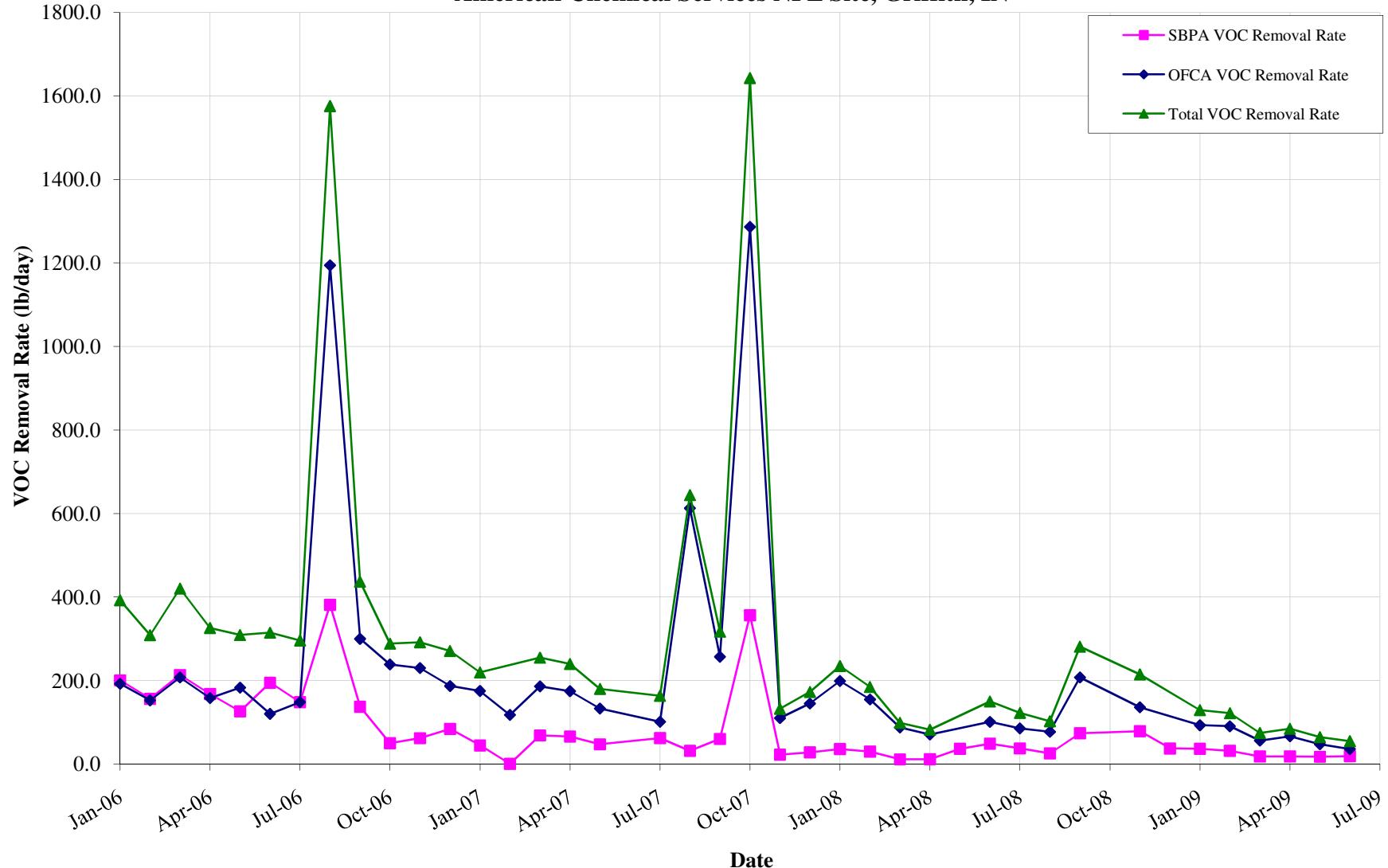
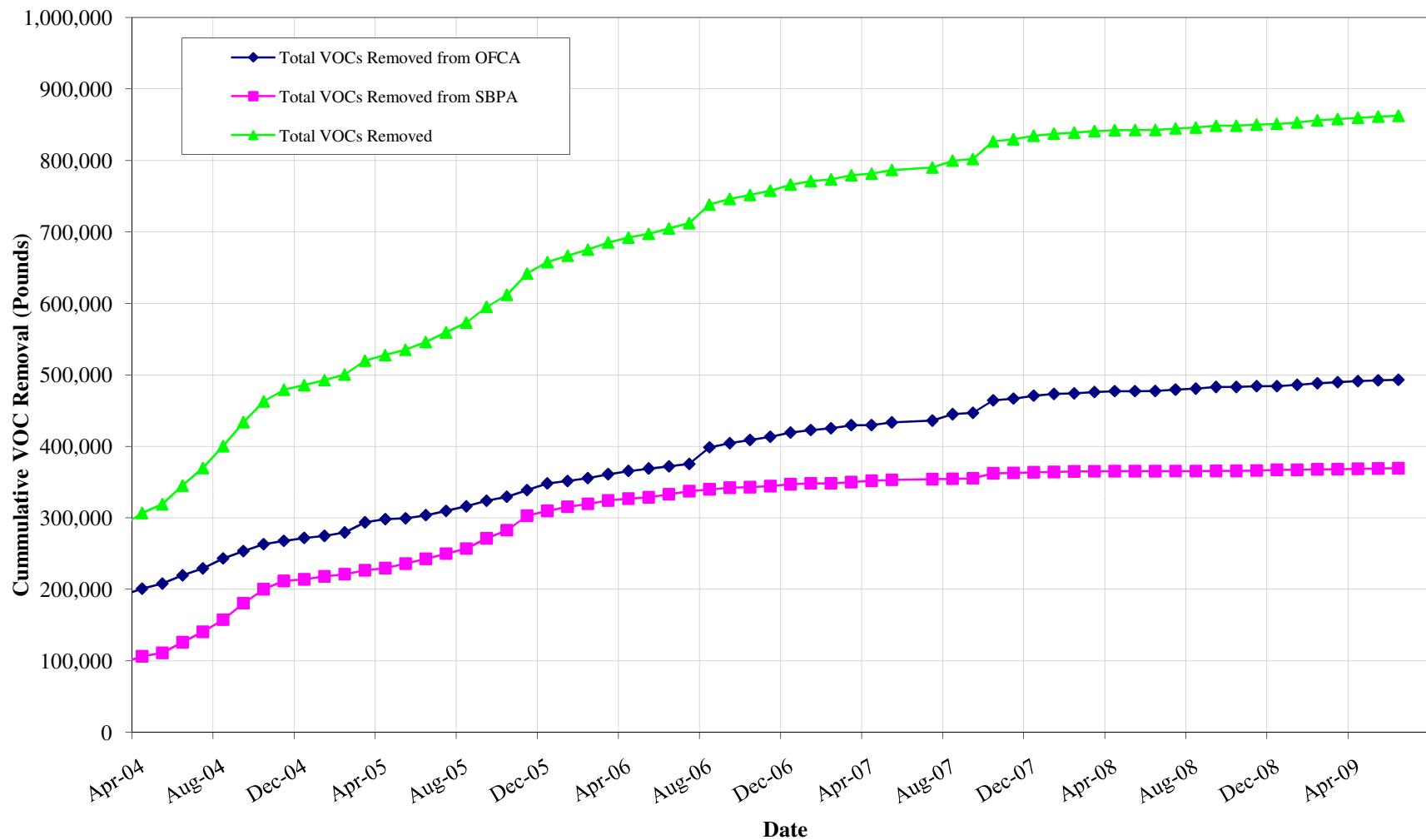
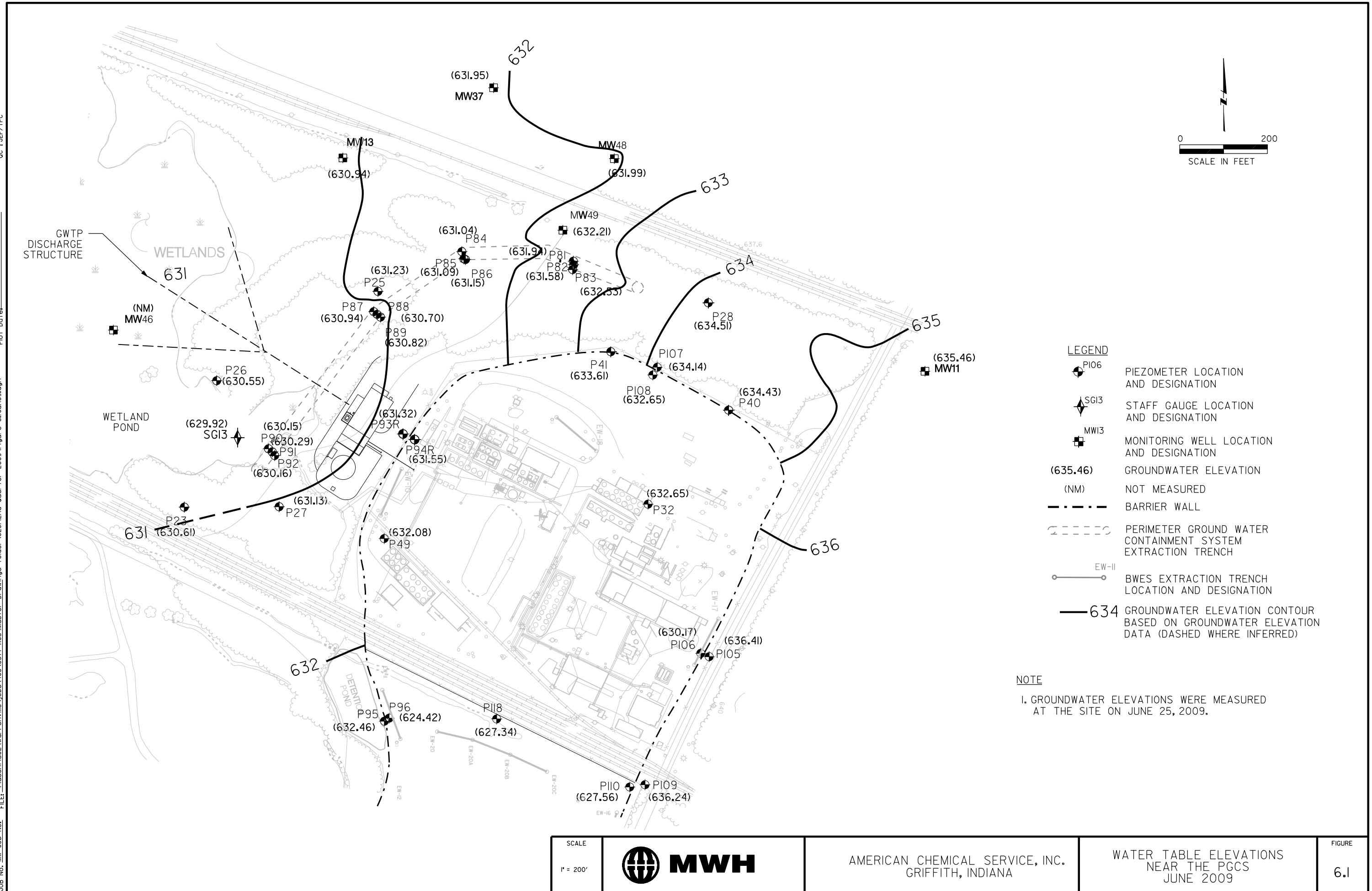
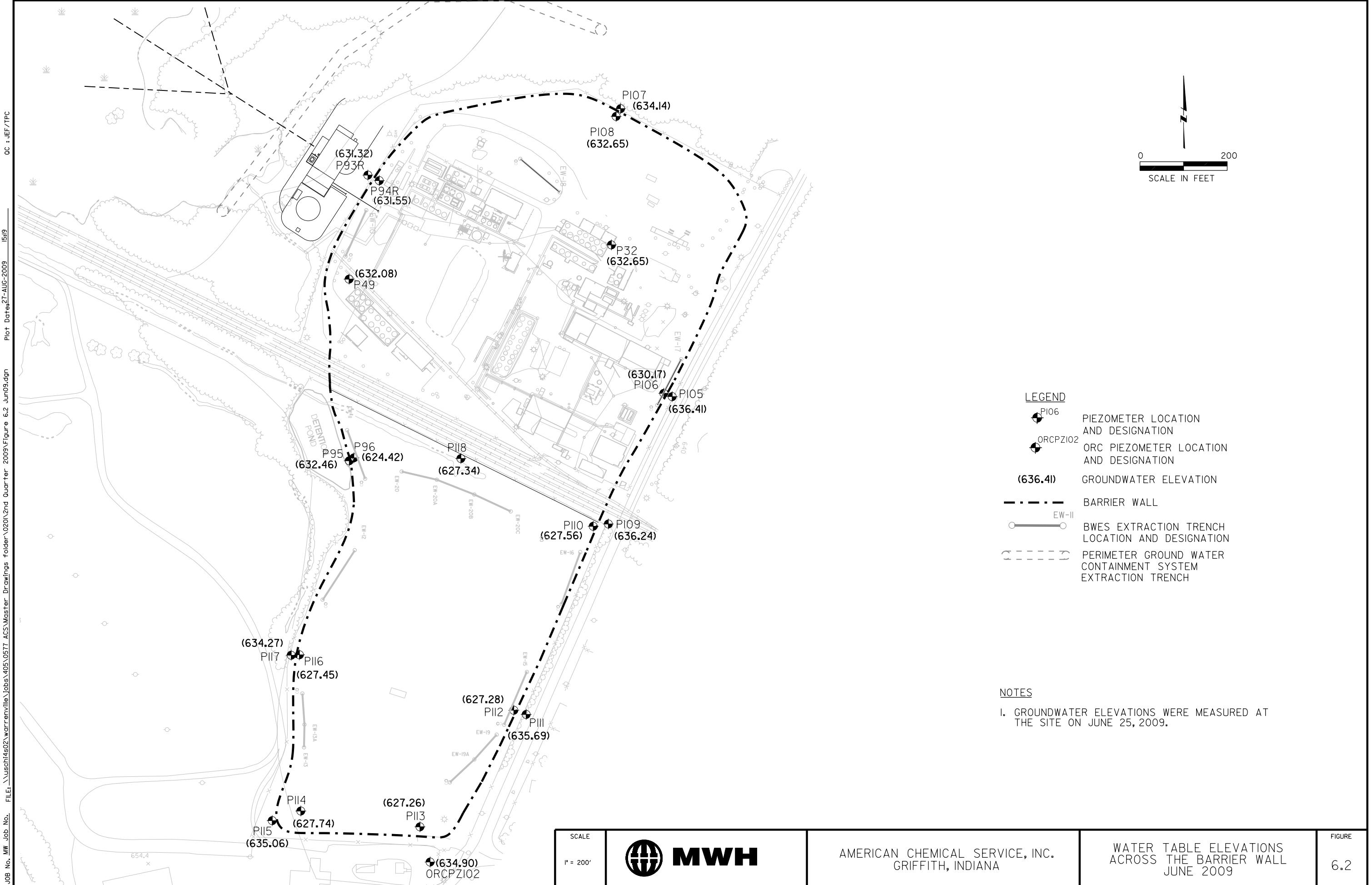


Figure 3.2
Total VOCs Removed
American Chemical Services NPL Site, Griffith, IN





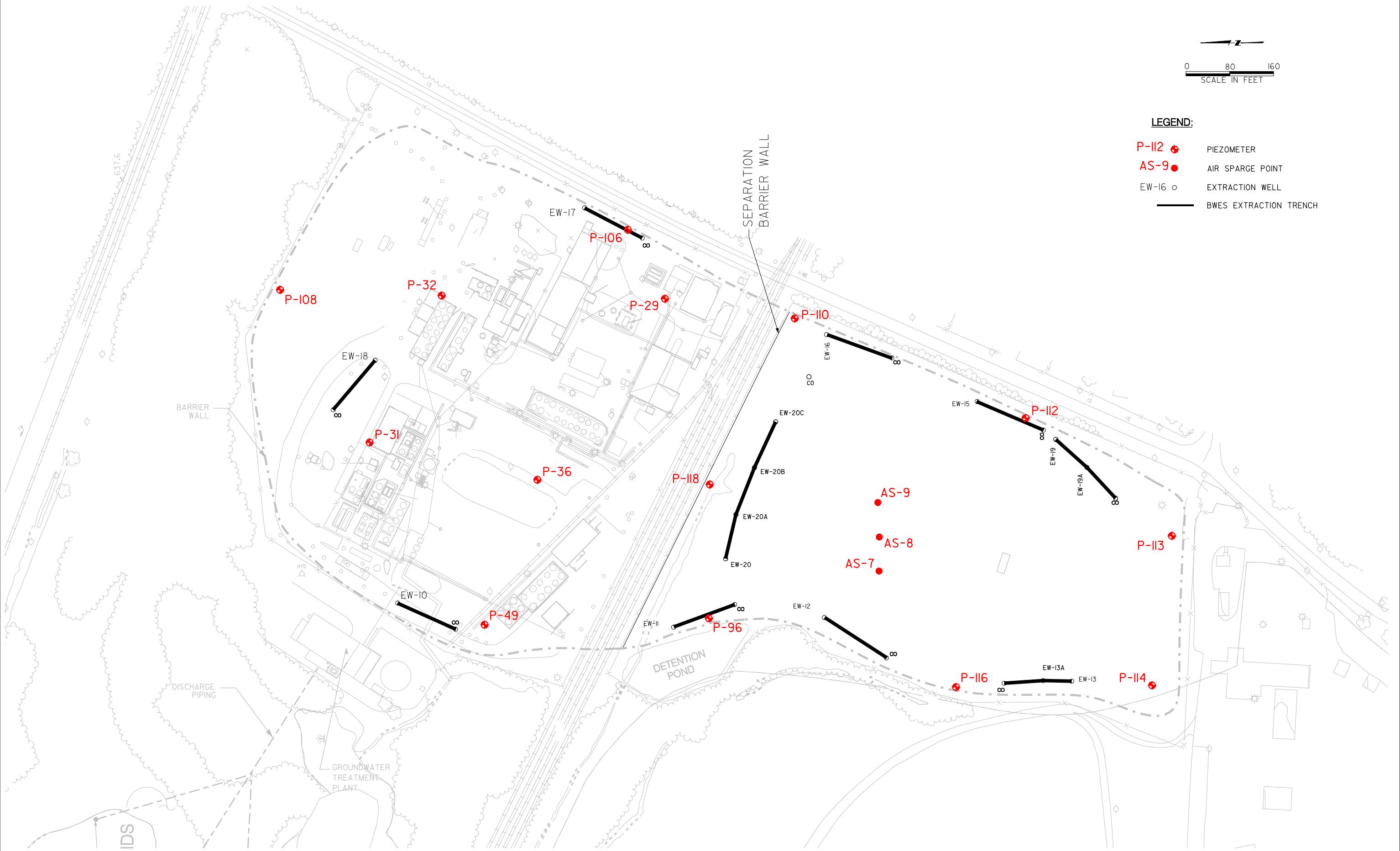


0 80 160
SCALE IN FEET

LEGEND:

- P-II2 • PIEZOMETER
- AS-9 • AIR SPARGE POINT
- EW-16 ○ EXTRATION WELL
- BWES EXTRACTION TRENCH

File: J:\405\0577 ACS\master cad files\0201\3rd quarter 2006\figure63.dgn
Plot Date: 19-MAR-2007 11:34



REV	DATE	BY	DESCRIPTION

AS SHOWN

SCALE
DESIGNED CAD
DRAWN CAD
CHECKED _____

SUBMITTED BY
ROBERT A. ADAMS
(PROJECT MANAGER)

LICENSE NO. _____ DATE _____

(COMPANY OFFICER)

LICENSE NO. _____ DATE _____



MWH
MONTGOMERY WATSON HARZA

AMERICAN CHEMICAL SERVICE SUPERFUND SITE
GRIFFITH, INDIANA

GROUNDWATER LEVEL MEASURING LOCATIONS

FIGURE
6.3

Figure 6.4
Water Level Trends Inside the Barrier Wall (Still Bottoms Pond Area)
ACS NPL Site
Griffith, Indiana

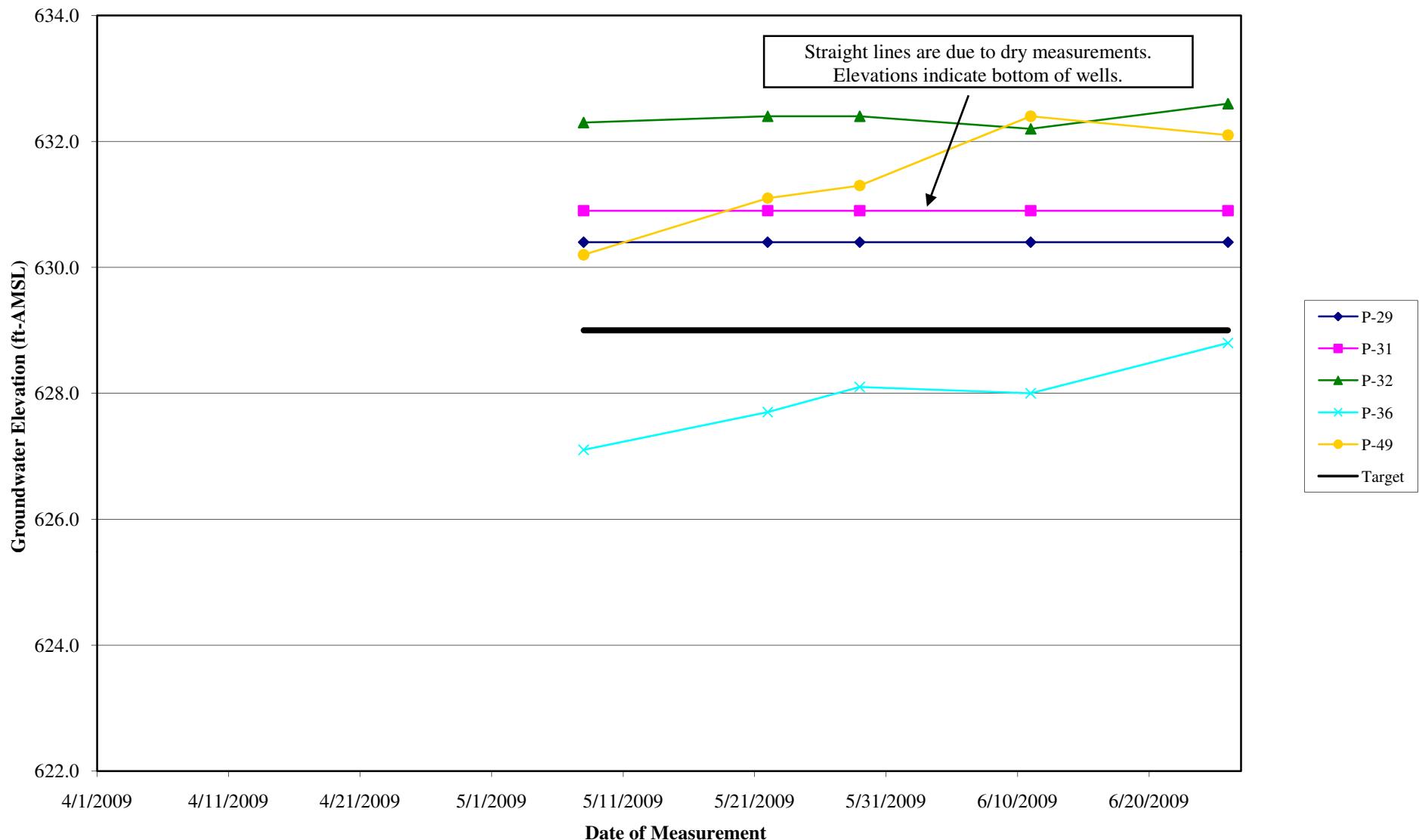
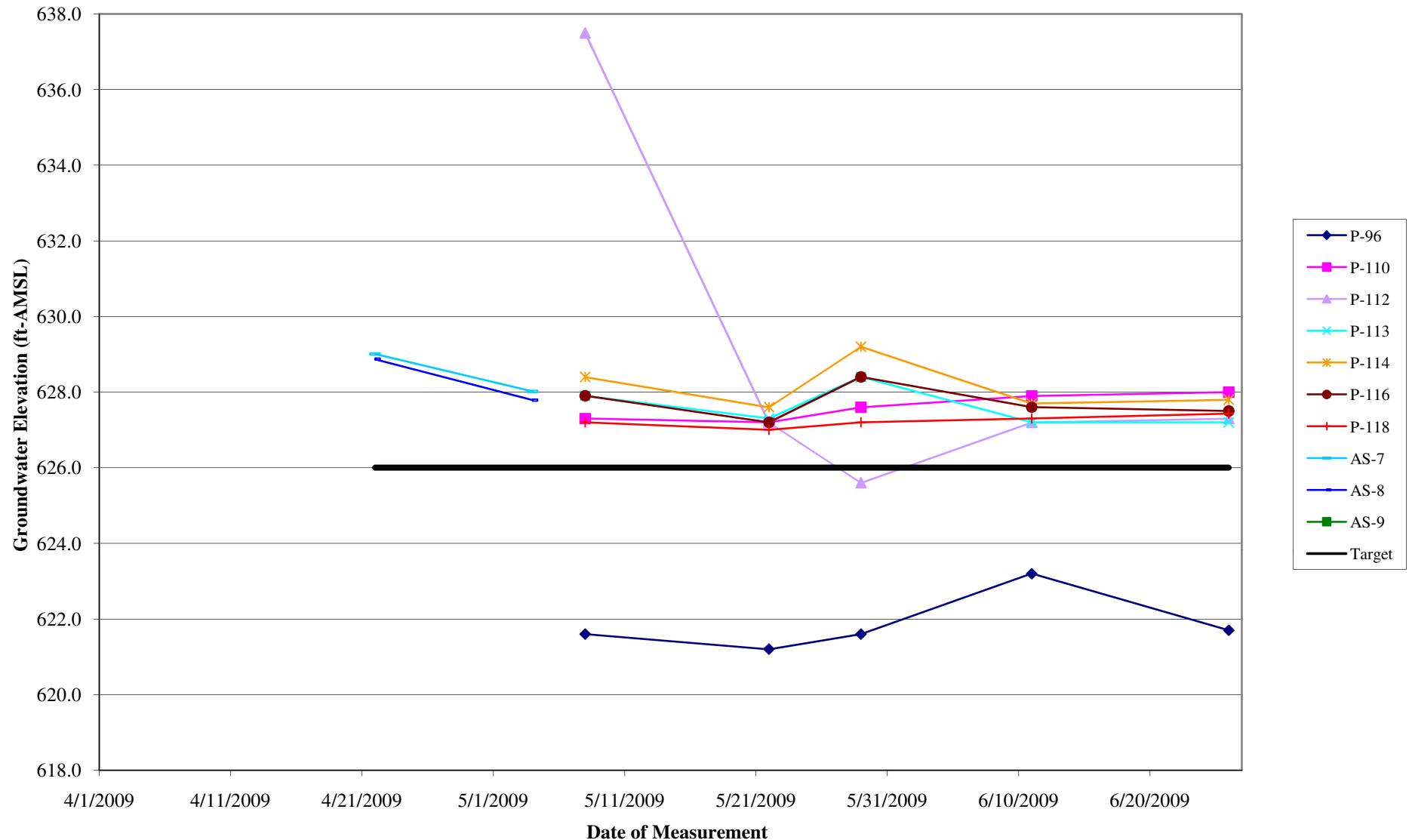


Figure 6.5
Water Level Trends Inside the Barrier Wall (Off-Site Area)
ACS NPL Site
Griffith, Indiana



APPENDIX A

EFFLUENT ANALYTICAL DATA

**April 14, 2009 Compliance Sample
Laboratory Results**



Microbac
ANALYTICAL RESULTS

Date: Wednesday, April 22, 2009

Client:	MWH, Inc.	Work Order / ID:	ME0904550-01
Client Project:	April 2009 - Quarterly GWTP / ACS	Collection Date:	04/14/09 14:50
Client Sample ID:	Effluent	Date Received:	04/14/09 16:30
Sample Description:			
Sample Matrix:	Aqueous		

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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PCB'S	Method: SW8082			Prep Date/Time: 04/16/09 10:26 Analyst: MLT				
Aroclor 1016	A	ND	0.00011	0.00052		mg/L	1	04/16/09 17:32
Aroclor 1221	A	ND	0.00052	0.00052		mg/L	1	04/16/09 17:32
Aroclor 1232	A	ND	0.00052	0.00052		mg/L	1	04/16/09 17:32
Aroclor 1242	A	ND	0.00010	0.00052		mg/L	1	04/16/09 17:32
Aroclor 1248	A	ND	0.00015	0.00052		mg/L	1	04/16/09 17:32
Aroclor 1254	A	ND	0.00017	0.00052		mg/L	1	04/16/09 17:32
Aroclor 1260	A	ND	0.00011	0.00052		mg/L	1	04/16/09 17:32
Surr: Tetrachloro-m-xylene	S	70.0	0	45.2-114		%REC	1	04/16/09 17:32
Surr: Decachlorobiphenyl	S	75.0	0	11.6-136		%REC	1	04/16/09 17:32

TOTAL METALS	Method: SW6010B			Prep Date/Time: 04/15/09 14:00 Analyst: SAA				
Arsenic	A	ND	0.0025	0.010		mg/L	1	04/16/09 20:29
Beryllium	A	ND	0.00000000014	0.0010		mg/L	1	04/16/09 20:29
Cadmium	A	ND	0.00030	0.0020		mg/L	1	04/16/09 20:29
Manganese	A	0.22	0.00030	0.0020		mg/L	1	04/16/09 20:29
Selenium	A	ND	0.0053	0.030		mg/L	1	04/16/09 20:29
Thallium	A	ND	0.0043	0.050		mg/L	1	04/16/09 20:29
Zinc	A	ND	0.0073	0.020		mg/L	1	04/16/09 20:29

TOTAL METALS	Method: SW7470A			Prep Date/Time: 04/16/09 15:45 Analyst: GJM				
Mercury	A	ND	0.000030	0.00020		mg/L	1	04/17/09 09:40

SEMIVOLATILE ORGANICS	Method: SW8270C			Prep Date/Time: 04/16/09 06:02 Analyst: BEM				
Bis(2-ethylhexyl)phthalate	A	0.0011	0.00056	0.0051	Jb	mg/L	1	04/20/09 21:49
Bis(2-chloroethyl)ether	A	ND	0.00045	0.0051		mg/L	1	04/20/09 21:49
2,2'-oxybis(1-chloropropane)	A	0.0013	0.00045	0.0051	J	mg/L	1	04/20/09 21:49
Isophorone	A	ND	0.00051	0.0051		mg/L	1	04/20/09 21:49
3/4-Methylphenol	A	ND	0.00040	0.0051		mg/L	1	04/20/09 21:49
Pentachlorophenol	A	ND	0.00066	0.025		mg/L	1	04/20/09 21:49
Surr: Nitrobenzene-d5	S	47.8	0	10-121		%REC	1	04/20/09 21:49
Surr: 2-Fluorobiphenyl	S	56.4	0	10-109		%REC	1	04/20/09 21:49
Surr: Terphenyl-d14	S	27.2	0	10-130		%REC	1	04/20/09 21:49
Surr: Phenol-d5	S	23.3	0	10-100		%REC	1	04/20/09 21:49
Surr: 2-Fluorophenol	S	36.2	0	10-84.7		%REC	1	04/20/09 21:49
Surr: 2,4,6-Tribromophenol	S	63.9	0	10-120		%REC	1	04/20/09 21:49

VOC'S Method: SW8260B Prep Date/Time: Analyst: BRR

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

4/21/09



Microbac
ANALYTICAL RESULTS

Date: Wednesday, April 22, 2009

Client: MWH, Inc.
Client Project: April 2009 - Quarterly GWTP / ACS
Client Sample ID: Effluent
Sample Description:
Sample Matrix: Aqueous

Work Order / ID: ME0904550-01
Collection Date: 04/14/09 14:50
Date Received: 04/14/09 16:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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VOC'S	Method: SW8260B			Prep Date/Time:			Analyst: BRR	
Acetone	A	ND	0.0020	0.0050		mg/L	1	04/18/09 12:31
Benzene	A	ND	0.00030	0.0010		mg/L	1	04/18/09 12:31
2-Butanone	A	ND	0.0015	0.0020		mg/L	1	04/18/09 12:31
Chloromethane	A	ND	0.00030	0.0020		mg/L	1	04/18/09 12:31
1,1-Dichloroethane	A	0.0047	0.00030	0.0010		mg/L	1	04/18/09 12:31
cis-1,2-Dichloroethene	A	0.023	0.00040	0.0010		mg/L	1	04/18/09 12:31
Ethylbenzene	A	ND	0.00020	0.0010		mg/L	1	04/18/09 12:31
4-Methyl-2-Pentanone	A	ND	0.00080	0.0010		mg/L	1	04/18/09 12:31
Methylene chloride	A	ND	0.00070	0.0020		mg/L	1	04/18/09 12:31
Tetrachloroethene	A	ND	0.00040	0.0010		mg/L	1	04/18/09 12:31
Trichloroethene	A	0.00036	0.00030	0.0010	J	mg/L	1	04/18/09 12:31
Vinyl chloride	A	0.00057	0.00040	0.0020	J	mg/L	1	04/18/09 12:31
1,4-Dichlorobenzene	A	ND	0.00020	0.0010		mg/L	1	04/18/09 12:31
Surr: 4-Bromofluorobenzene	S	99.0		0	75.2-115	%REC	1	04/18/09 12:31
Surr: Dibromofluoromethane	S	98.9		0	92.7-119	%REC	1	04/18/09 12:31
Surr: 1,2-Dichloroethane-d4	S	105		0	88.2-132	%REC	1	04/18/09 12:31
Surr: Toluene-d8	S	102		0	89.3-116	%REC	1	04/18/09 12:31

BOD, 5 DAY	Method: 5210B_18ED			Prep Date/Time: 04/14/09 22:54			Analyst: GBZ	
Biochemical Oxygen Demand	A	ND	2.0	2.0		mg/L	1	04/14/09 22:54

PH	Method: 4500H B/9040C			Prep Date/Time:			Analyst: SMA	
pH	A	7.06	0.02	0.02	H	pH units	1	04/20/09 16:00

TOTAL SUSPENDED SOLIDS	Method: 2540D_18ED			Prep Date/Time:			Analyst: TMG	
Total Suspended Solids	A	ND	1.0	1.0		mg/L	1	04/15/09 09:50

4/21/09

**May 12, 2009 Compliance Sample
Laboratory Results**

ANALYTICAL RESULTS

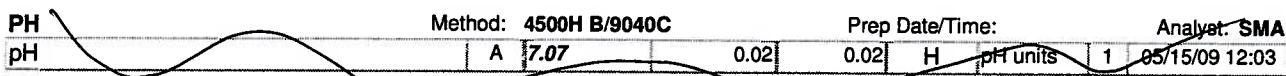
Date: Tuesday, May 19, 2009

Client: MWH, Inc.
Client Project: GWTP - Monthly / ACS
Client Sample ID: Effluent
Sample Description:
Sample Matrix: Aqueous

Work Order / ID: ME0905500-01
Collection Date: 05/12/09 11:45
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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VOC'S	Method: SW8260B			Prep Date/Time:			Analyst: NLT	
Acetone	A	0.016	0.0020	0.0050		mg/L	1	05/12/09 18:58
Benzene	A	ND	0.00030	0.0010		mg/L	1	05/12/09 18:58
2-Butanone	A	ND	0.0015	0.0020		mg/L	1	05/12/09 18:58
Chloromethane	A	ND	0.00030	0.0020		mg/L	1	05/12/09 18:58
1,1-Dichloroethane	A	0.0077	0.00030	0.0010		mg/L	1	05/12/09 18:58
cis-1,2-Dichloroethene	A	0.052	0.0020	0.0050		mg/L	5	05/14/09 11:31
Ethylbenzene	A	ND	0.00020	0.0010		mg/L	1	05/12/09 18:58
4-Methyl-2-Pentanone	A	ND	0.00080	0.0010		mg/L	1	05/12/09 18:58
Methylene chloride	A	ND	0.00070	0.0020		mg/L	1	05/12/09 18:58
Tetrachloroethene	A	0.00063	0.00040	0.0010	J	mg/L	1	05/12/09 18:58
Trichloroethene	A	0.00097	0.00030	0.0010	J	mg/L	1	05/12/09 18:58
Vinyl chloride	A	0.0014	0.00040	0.0020	J	mg/L	1	05/12/09 18:58
1,4-Dichlorobenzene	A	ND	0.00020	0.0010		mg/L	1	05/12/09 18:58
Surr: 4-Bromofluorobenzene	S	96.1	0	75.2-115		%REC	1	05/12/09 18:58
Surr: Dibromofluoromethane	S	99.0	0	92.7-119		%REC	1	05/12/09 18:58
Surr: 1,2-Dichloroethane-d4	S	104	0	88.2-132		%REC	1	05/12/09 18:58
Surr: Toluene-d8	S	97.4	0	89.3-116		%REC	1	05/12/09 18:58





Microbac
ANALYTICAL RESULTS

 Date: *Tuesday, May 19, 2009*

Client: MWH, Inc.
Client Project: GWTP - Monthly / ACS
Client Sample ID: Effluent
Sample Description:
Sample Matrix: Aqueous

Work Order / ID: ME0905500-01
Collection Date: 05/12/09 11:45
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
----------	----	--------	-----	----	------	-------	----	----------

VOC's		Method:	SW8260B	Prep Date/Time:			Analyst: NLT	
Acetone	A	0.016	0.0020	0.0050	mg/L	1	05/12/09 18:58	
Benzene	A	ND	0.00030	0.0010	mg/L	1	05/12/09 18:58	
2-Butanone	A	ND	0.0015	0.0020	mg/L	1	05/12/09 18:58	
Chloromethane	A	ND	0.00030	0.0020	mg/L	1	05/12/09 18:58	
1,1-Dichloroethane	A	0.0077	0.00030	0.0010	mg/L	1	05/12/09 18:58	
cis-1,2-Dichloroethene	A	0.052	0.0020	0.0050	mg/L	5	05/14/09 11:31	
Ethylbenzene	A	ND	0.00020	0.0010	mg/L	1	05/12/09 18:58	
4-Methyl-2-Pentanone	A	ND	0.00080	0.0010	mg/L	1	05/12/09 18:58	
Methylene chloride	A	ND	0.00070	0.0020	mg/L	1	05/12/09 18:58	
Tetrachloroethene	A	0.00063	0.00040	0.0010	J	mg/L	1	05/12/09 18:58
Trichloroethene	A	0.00097	0.00030	0.0010	J	mg/L	1	05/12/09 18:58
Vinyl chloride	A	0.0014	0.00040	0.0020	J	mg/L	1	05/12/09 18:58
1,4-Dichlorobenzene	A	ND	0.00020	0.0010	mg/L	1	05/12/09 18:58	
Surr: 4-Bromofluorobenzene	S	96.1	0	75.2-115	%REC	1	05/12/09 18:58	
Surr: Dibromofluoromethane	S	99.0	0	92.7-119	%REC	1	05/12/09 18:58	
Surr: 1,2-Dichloroethane-d4	S	104	0	88.2-132	%REC	1	05/12/09 18:58	
Surr: Toluene-d8	S	97.4	0	89.3-116	%REC	1	05/12/09 18:58	

PH		Method:	4500H B/9040C	Prep Date/Time:			Analyst: SMA	
pH	A	7.07	0.02	0.02	H	pH units	1	05/15/09 12:03

5/11/09

**June 25, 2009 Compliance Sample
Laboratory Results**

ANALYTICAL RESULTS

Date: Monday, July 06, 2009

Client: MWH, Inc.
Client Project: GWTP - Monthly / ACS
Client Sample ID: Effluent - June 2009
Sample Description:
Sample Matrix: Aqueous

Work Order / ID: ME0906C26-01
Collection Date: 06/25/09 13:30
Date Received: 06/25/09 14:10

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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VOC'S	Method: SW8260B			Prep Date/Time:			Analyst: CLR	
Acetone	A	0.0034	0.0020	0.0050	J	mg/L	1	07/04/09 04:10
Benzene	A	ND	0.00030	0.0010		mg/L	1	07/04/09 04:10
2-Butanone	A	ND	0.0015	0.0020		mg/L	1	07/04/09 04:10
Chloromethane	A	ND	0.00030	0.0020		mg/L	1	07/04/09 04:10
1,1-Dichloroethane	A	0.0062	0.00030	0.0010		mg/L	1	07/04/09 04:10
cis-1,2-Dichloroethene	A	0.044	0.0040	0.010		mg/L	10	07/04/09 12:34
Ethylbenzene	A	ND	0.00020	0.0010		mg/L	1	07/04/09 04:10
4-Methyl-2-Pentanone	A	ND	0.00080	0.0010		mg/L	1	07/04/09 04:10
Methylene chloride	A	ND	0.00070	0.0020		mg/L	1	07/04/09 04:10
Tetrachloroethene	A	ND	0.00040	0.0010		mg/L	1	07/04/09 04:10
Trichloroethene	A	0.00079	0.00030	0.0010	J	mg/L	1	07/04/09 04:10
Vinyl chloride	A	0.0013	0.00040	0.0020	J	mg/L	1	07/04/09 04:10
1,4-Dichlorobenzene	A	ND	0.00020	0.0010		mg/L	1	07/04/09 04:10
Surr: 4-Bromofluorobenzene	S	97.6	0	75.2-115		%REC	1	07/04/09 04:10
Surr: Dibromofluoromethane	S	102	0	92.7-119		%REC	1	07/04/09 04:10
Surr: 1,2-Dichloroethane-d4	S	107	0	88.2-132		%REC	1	07/04/09 04:10
Surr: Toluene-d8	S	102	0	89.3-116		%REC	1	07/04/09 04:10

PH	Method: 4500H B/9040C			Prep Date/Time:			Analyst: SMA	
pH	A	7.00	0.02	0.02	H	pH units	1	07/02/09 16:45

8/11/09

ANALYTICAL RESULTS

Date: Monday, July 06, 2009

Client: MWH, Inc.
Client Project: GWTP - Monthly / ACS
Client Sample ID: Effluent - June 2009
Sample Description:
Sample Matrix: Aqueous

Work Order / ID: ME0906C26-01
Collection Date: 06/25/09 13:30
Date Received: 06/25/09 14:10

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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VOC'S	Method: SW8260B			Prep Date/Time:			Analyst: CLR	
Acetone	A	0.0034	0.0020	0.0050	J	mg/L	1	07/04/09 04:10
Benzene	A	ND	0.00030	0.0010		mg/L	1	07/04/09 04:10
2-Butanone	A	ND	0.0015	0.0020		mg/L	1	07/04/09 04:10
Chloromethane	A	ND	0.00030	0.0020		mg/L	1	07/04/09 04:10
1,1-Dichloroethane	A	0.0062	0.00030	0.0010		mg/L	1	07/04/09 04:10
cis-1,2-Dichloroethene	A	0.044	0.0040	0.010		mg/L	10	07/04/09 12:34
Ethylbenzene	A	ND	0.00020	0.0010		mg/L	1	07/04/09 04:10
4-Methyl-2-Pentanone	A	ND	0.00080	0.0010		mg/L	1	07/04/09 04:10
Methylene chloride	A	ND	0.00070	0.0020		mg/L	1	07/04/09 04:10
Tetrachloroethene	A	ND	0.00040	0.0010		mg/L	1	07/04/09 04:10
Trichloroethene	A	0.00079	0.00030	0.0010	J	mg/L	1	07/04/09 04:10
Vinyl chloride	A	0.0013	0.00040	0.0020	J	mg/L	1	07/04/09 04:10
1,4-Dichlorobenzene	A	ND	0.00020	0.0010		mg/L	1	07/04/09 04:10
Surr: 4-Bromofluorobenzene	S	97.6	0	75.2-115		%REC	1	07/04/09 04:10
Surr: Dibromofluoromethane	S	102	0	92.7-119		%REC	1	07/04/09 04:10
Surr: 1,2-Dichloroethane-d4	S	107	0	88.2-132		%REC	1	07/04/09 04:10
Surr: Toluene-d8	S	102	0	89.3-116		%REC	1	07/04/09 04:10

PH	Method: 4500H B/9040C			Prep Date/Time:			Analyst: SMA	
pH	A	7.00	0.02	0.02	H	pH units	1	07/02/09 16:45

9/11/09

APPENDIX B

THERMAL OXIDIZER OFF-GAS ANALYTICAL DATA

April 23, 2009 Off-Gas Sample Laboratory Results



ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-01A
Collection Date: 04/13/09 12:55
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15			Prep Date/Time:		Analyst: MAK	
1,1,1-Trichloroethane	A	13000	450	1500	ppbv	3,00	04/16/09 22:09	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	04/23/09 21:23	
1,1,2-Trichloroethane	A	49	10	30	ppbv	60	04/23/09 21:23	
1,1-Dichloroethane	A	1100	8.4	30	ppbv	60	04/23/09 21:23	
1,1-Dichloroethene	A	29	10	30	J	ppbv	60	04/23/09 21:23
1,2-Dichloroethane	A	210	10	30	ppbv	60	04/23/09 21:23	
1,2-Dichloropropane	A	ND	8.4	30	ppbv	60	04/23/09 21:23	
2-Butanone	A	3000	36	600	ppbv	300	04/16/09 18:11	
2-Hexanone	A	ND	20	120	ppbv	60	04/23/09 21:23	
4-Methyl-2-Pentanone	A	1100	14	30	ppbv	60	04/23/09 21:23	
Acetone	A	2800	170	600	ppbv	300	04/16/09 18:11	
Benzene	A	3400	36	150	ppbv	300	04/16/09 18:11	
Bromodichloromethane	A	ND	9	30	ppbv	60	04/23/09 21:23	
Bromoform	A	ND	10	30	ppbv	60	04/23/09 21:23	
Bromomethane	A	ND	11	30	ppbv	60	04/23/09 21:23	
Carbon disulfide	A	ND	11	30	ppbv	60	04/23/09 21:23	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	04/23/09 21:23	
Chlorobenzene	A	ND	9.6	30	ppbv	60	04/23/09 21:23	
Chloroethane	A	64	10	30	ppbv	60	04/23/09 21:23	
Chloroform	A	1100	7.2	30	ppbv	60	04/23/09 21:23	
Chloromethane	A	ND	14	120	ppbv	60	04/23/09 21:23	
cis-1,2-Dichloroethene	A	1000	42	150	ppbv	300	04/16/09 18:11	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	04/23/09 21:23	
Dibromochloromethane	A	ND	10	30	ppbv	60	04/23/09 21:23	
Ethyl benzene	A	3200	54	150	ppbv	300	04/16/09 18:11	
m,p-Xylene	A	20000	900	3000	ppbv	1,00	04/16/09 22:09	
Methylene chloride	A	11000	420	6000	ppbv	1,00	04/16/09 22:09	
o-Xylene	A	5300	51	150	ppbv	300	04/16/09 18:11	
Styrene	A	93	11	30	ppbv	60	04/23/09 21:23	
Tetrachloroethene	A	5300	51	150	ppbv	300	04/16/09 18:11	
Toluene	A	33000	540	1500	ppbv	1,00	04/16/09 22:09	
trans-1,2-Dichloroethene	A	ND	19	30	ppbv	60	04/23/09 21:23	
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	04/23/09 21:23	
Trichloroethene	A	5100	48	150	ppbv	300	04/16/09 18:11	
Vinyl chloride	A	52	9	30	ppbv	60	04/23/09 21:23	
Surr: 4-Bromofluorobenzene	S	101	0	77.7-127	%REC	60	04/23/09 21:23	



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ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-02A
Collection Date: 04/13/09 12:58
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15			Prep Date/Time:		Analyst: MAK	
1,1,1-Trichloroethane	A	11000	450	1500	ppbv	,00	04/16/09 22:51	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	04/23/09 22:04	
1,1,2-Trichloroethane	A	ND	10	30	ppbv	60	04/23/09 22:04	
1,1-Dichloroethane	A	890	8.4	30	ppbv	60	04/23/09 22:04	
1,1-Dichloroethene	A	31	10	30	ppbv	60	04/23/09 22:04	
1,2-Dichloroethane	A	86	10	30	ppbv	60	04/23/09 22:04	
1,2-Dichloropropane	A	ND	8.4	30	ppbv	60	04/23/09 22:04	
2-Butanone	A	97	7.2	120	J	ppbv	60	04/23/09 22:04
2-Hexanone	A	ND	20	120	ppbv	60	04/23/09 22:04	
4-Methyl-2-Pentanone	A	280	14	30	ppbv	60	04/23/09 22:04	
Acetone	A	200	34	120	ppbv	60	04/23/09 22:04	
Benzene	A	710	7.2	30	ppbv	60	04/23/09 22:04	
Bromodichloromethane	A	ND	9	30	ppbv	60	04/23/09 22:04	
Bromoform	A	ND	10	30	ppbv	60	04/23/09 22:04	
Bromomethane	A	ND	11	30	ppbv	60	04/23/09 22:04	
Carbon disulfide	A	ND	11	30	ppbv	60	04/23/09 22:04	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	04/23/09 22:04	
Chlorobenzene	A	ND	9.6	30	ppbv	60	04/23/09 22:04	
Chloroethane	A	82	10	30	ppbv	60	04/23/09 22:04	
Chloroform	A	990	7.2	30	ppbv	60	04/23/09 22:04	
Chloromethane	A	ND	14	120	ppbv	60	04/23/09 22:04	
cis-1,2-Dichloroethene	A	3500	42	150	ppbv	300	04/16/09 18:51	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	04/23/09 22:04	
Dibromochloromethane	A	ND	10	30	ppbv	60	04/23/09 22:04	
Ethyl benzene	A	1100	11	30	ppbv	60	04/23/09 22:04	
m,p-Xylene	A	5300	90	300	ppbv	300	04/16/09 18:51	
Methylene chloride	A	2200	42	1200	ppbv	300	04/16/09 18:51	
o-Xylene	A	2700	51	150	ppbv	300	04/16/09 18:51	
Styrene	A	20	11	30	J	ppbv	60	04/23/09 22:04
Tetrachloroethene	A	5300	51	150	ppbv	300	04/16/09 18:51	
Toluene	A	4900	54	150	ppbv	300	04/16/09 18:51	
trans-1,2-Dichloroethene	A	24	19	30	J	ppbv	60	04/23/09 22:04
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	04/23/09 22:04	
Trichloroethene	A	3300	48	150	ppbv	300	04/16/09 18:51	
Vinyl chloride	A	260	9	30	ppbv	60	04/23/09 22:04	
<i>Sur: 4-Bromofluorobenzene</i>	S	94.4	0	77.7-127	%REC	60	04/23/09 22:04	



ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-03A
Collection Date: 04/13/09 13:10
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
TOXIC ORGANICS IN AIR BY GC/MS Method: TO-15								
1,1,1-Trichloroethane	A	10000	450	1500	ppbv	1,00	04/16/09 23:34	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	04/23/09 22:45	
1,1,2-Trichloroethane	A	ND	10	30	ppbv	60	04/23/09 22:45	
1,1-Dichloroethane	A	840	8.4	30	ppbv	60	04/23/09 22:45	
1,1-Dichloroethene	A	31	10	30	ppbv	60	04/23/09 22:45	
1,2-Dichloroethane	A	86	10	30	ppbv	60	04/23/09 22:45	
1,2-Dichloropropane	A	ND	8.4	30	ppbv	60	04/23/09 22:45	
2-Butanone	A	94	7.2	120	J	ppbv	60	04/23/09 22:45
2-Hexanone	A	ND	20	120	ppbv	60	04/23/09 22:45	
4-Methyl-2-Pentanone	A	370	14	30	ppbv	60	04/23/09 22:45	
Acetone	A	170	34	120	ppbv	60	04/23/09 22:45	
Benzene	A	660	7.2	30	ppbv	60	04/23/09 22:45	
Bromodichloromethane	A	33	9	30	ppbv	60	04/23/09 22:45	
Bromoform	A	ND	10	30	ppbv	60	04/23/09 22:45	
Bromomethane	A	ND	11	30	ppbv	60	04/23/09 22:45	
Carbon disulfide	A	ND	11	30	ppbv	60	04/23/09 22:45	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	04/23/09 22:45	
Chlorobenzene	A	ND	9.6	30	ppbv	60	04/23/09 22:45	
Chloroethane	A	90	10	30	ppbv	60	04/23/09 22:45	
Chloroform	A	1000	7.2	30	ppbv	60	04/23/09 22:45	J
Chloromethane	A	ND	14	120	ppbv	60	04/23/09 22:45	
cis-1,2-Dichloroethene	A	3300	42	150	ppbv	300	04/16/09 19:29	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	04/23/09 22:45	
Dibromochloromethane	A	ND	10	30	ppbv	60	04/23/09 22:45	
Ethyl benzene	A	1300	54	150	ppbv	300	04/16/09 19:29	
m,p-Xylene	A	5100	90	300	ppbv	300	04/16/09 19:29	
Methylene chloride	A	2100	42	1200	ppbv	300	04/16/09 19:29	
o-Xylene	A	2500	51	150	ppbv	300	04/16/09 19:29	
Styrene	A	25	11	30	J	ppbv	60	04/23/09 22:45
Tetrachloroethene	A	5100	51	150	ppbv	300	04/16/09 19:29	
Toluene	A	4600	54	150	ppbv	300	04/16/09 19:29	
trans-1,2-Dichloroethene	A	23	19	30	J	ppbv	60	04/16/09 19:29
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	04/23/09 22:45	
Trichloroethene	A	3200	48	150	ppbv	300	04/16/09 19:29	
Vinyl chloride	A	280	9	30	ppbv	60	04/23/09 22:45	
Surr: 4-Bromofluorobenzene	S	106	0	77.7-127	%REC	60	04/23/09 22:45	

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ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-04A
Collection Date: 04/13/09 13:40
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method:	TO-15			Prep Date/Time:		Analyst:	MAK
1,1,1-Trichloroethane	A	9900	450	1500	ppbv	1,00	04/17/09 00:17	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	04/23/09 23:27	
1,1,2-Trichloroethane	A	ND	10	30	ppbv	60	04/23/09 23:27	
1,1-Dichloroethane	A	880	8.4	30	ppbv	60	04/23/09 23:27	
1,1-Dichloroethene	A	31	10	30	ppbv	60	04/23/09 23:27	
1,2-Dichloroethane	A	85	10	30	ppbv	60	04/23/09 23:27	
1,2-Dichloropropane	A	ND	8.4	30	ppbv	60	04/23/09 23:27	
2-Butanone	A	89	7.2	120	J	ppbv	60	04/23/09 23:27
2-Hexanone	A	ND	20	120	ppbv	60	04/23/09 23:27	
4-Methyl-2-Pentanone	A	250	14	30	ppbv	60	04/23/09 23:27	
Acetone	A	260	34	120	ppbv	60	04/23/09 23:27	
Benzene	A	700	7.2	30	ppbv	60	04/23/09 23:27	
Bromodichloromethane	A	ND	9	30	ppbv	60	04/23/09 23:27	
Bromoform	A	ND	10	30	ppbv	60	04/23/09 23:27	
Bromomethane	A	ND	11	30	ppbv	60	04/23/09 23:27	
Carbon disulfide	A	ND	11	30	ppbv	60	04/23/09 23:27	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	04/23/09 23:27	
Chlorobenzene	A	ND	9.6	30	ppbv	60	04/23/09 23:27	
Chloroethane	A	83	10	30	ppbv	60	04/23/09 23:27	
Chloroform	A	970	7.2	30	ppbv	60	04/23/09 23:27	
Chloromethane	A	ND	14	120	ppbv	60	04/23/09 23:27	
cis-1,2-Dichloroethene	A	3300	42	150	ppbv	300	04/16/09 20:09	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	04/23/09 23:27	
Dibromochloromethane	A	ND	10	30	ppbv	60	04/23/09 23:27	
Ethyl benzene	A	1100	11	30	ppbv	60	04/23/09 23:27	
m,p-Xylene	A	4600	90	300	ppbv	300	04/16/09 20:09	
Methylene chloride	A	2200	42	1200	ppbv	300	04/16/09 20:09	
o-Xylene	A	2300	51	150	ppbv	300	04/16/09 20:09	
Styrene	A	23	11	30	J	ppbv	60	04/23/09 23:27
Tetrachloroethene	A	4900	51	150	ppbv	300	04/16/09 20:09	
Toluene	A	4500	54	150	ppbv	300	04/16/09 20:09	
trans-1,2-Dichloroethene	A	24	19	30	J	ppbv	60	04/23/09 23:27
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	04/23/09 23:27	
Trichloroethene	A	3200	48	150	ppbv	300	04/16/09 20:09	
Vinyl chloride	A	250	9	30	ppbv	60	04/23/09 23:27	
Surr: 4-Bromofluorobenzene	S	102	0	77.7-127	%REC	60	04/23/09 23:27	



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ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-05A
Collection Date: 04/13/09 13:15
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method:	TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	28	0.75	2.5	ppbv	5	04/15/09 00:09	
1,1,2,2-Tetrachloroethane	A	ND	0.22	0.50	ppbv	1	04/15/09 03:09	
1,1,2-Trichloroethane	A	ND	0.17	0.50	ppbv	1	04/15/09 03:09	
1,1-Dichloroethane	A	5.5	0.14	0.50	ppbv	1	04/15/09 03:09	
1,1-Dichloroethene	A	14	0.17	0.50	ppbv	1	04/15/09 03:09	
1,2-Dichloroethane	A	0.88	0.17	0.50	ppbv	1	04/15/09 03:09	
1,2-Dichloropropane	A	ND	0.14	0.50	ppbv	1	04/15/09 03:09	
2-Butanone	A	2.8	0.12	2.0	ppbv	1	04/15/09 03:09	
2-Hexanone	A	ND	0.34	2.0	ppbv	1	04/15/09 03:09	
4-Methyl-2-Pentanone	A	6.3	0.24	0.50	ppbv	1	04/15/09 03:09	
Acetone	A	3.0	0.56	2.0	ppbv	1	04/15/09 03:09	
Benzene	A	13	0.12	0.50	ppbv	1	04/15/09 03:09	
Bromodichloromethane	A	ND	0.15	0.50	ppbv	1	04/15/09 03:09	
Bromoform	A	ND	0.17	0.50	ppbv	1	04/15/09 03:09	
Bromomethane	A	ND	0.19	0.50	ppbv	1	04/15/09 03:09	
Carbon disulfide	A	ND	0.18	0.50	ppbv	1	04/15/09 03:09	
Carbon tetrachloride	A	ND	0.16	0.50	ppbv	1	04/15/09 03:09	
Chlorobenzene	A	ND	0.16	0.50	ppbv	1	04/15/09 03:09	
Chloroethane	A	0.78	0.17	0.50	ppbv	1	04/15/09 03:09	
Chloroform	A	4.8	0.12	0.50	ppbv	1	04/15/09 03:09	
Chloromethane	A	0.84	0.23	2.0	J	ppbv	1	04/15/09 03:09
cis-1,2-Dichloroethene	A	10	0.14	0.50	ppbv	1	04/15/09 03:09	
cis-1,3-Dichloropropene	A	ND	0.14	0.50	ppbv	1	04/15/09 03:09	
Dibromochloromethane	A	ND	0.17	0.50	ppbv	1	04/15/09 03:09	
Ethyl benzene	A	9.0	0.18	0.50	ppbv	1	04/15/09 03:09	
m,p-Xylene	A	37	0.3	1.0	ppbv	1	04/15/09 03:09	
Methylene chloride	A	27	0.7	20	ppbv	5	04/15/09 00:09	
o-Xylene	A	16	0.17	0.50	ppbv	1	04/15/09 03:09	
Styrene	A	1.9	0.19	0.50	ppbv	1	04/15/09 03:09	
Tetrachloroethene	A	32	0.85	2.5	ppbv	5	04/15/09 03:09	
Toluene	A	77	0.9	2.5	ppbv	5	04/15/09 00:09	
trans-1,2-Dichloroethene	A	2.5	0.31	0.50	ppbv	1	04/15/09 03:09	
trans-1,3-Dichloropropene	A	ND	0.12	0.50	ppbv	1	04/15/09 03:09	
Trichloroethene	A	19	0.16	0.50	ppbv	1	04/15/09 03:09	
Vinyl chloride	A	0.49	0.15	0.50	J	ppbv	1	04/15/09 03:09
Surr: 4-Bromofluorobenzene	S	97.4	0	77.7-127	%REC	1	04/15/09 03:09	

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ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-06A
Collection Date: 04/13/09 13:55
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method:	TO-15	Prep Date/Time:			Analyst: MAK	
1,1,1-Trichloroethane	A	9100	450	1500	ppbv	3,00	04/17/09 01:01
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	04/24/09 00:10
1,1,2-Trichloroethane	A	52	10	30	ppbv	60	04/24/09 00:10
1,1-Dichloroethane	A	1300	42	150	ppbv	300	04/16/09 20:50
1,1-Dichloroethene	A	34	10	30	ppbv	60	04/24/09 00:10
1,2-Dichloroethane	A	210	10	30	ppbv	60	04/24/09 00:10
1,2-Dichloropropane	A	ND	8.4	30	ppbv	60	04/24/09 00:10
2-Butanone	A	2500	36	600	ppbv	300	04/16/09 20:50
2-Hexanone	A	ND	20	120	ppbv	60	04/24/09 00:10
4-Methyl-2-Pentanone	A	1000	14	30	ppbv	60	04/24/09 00:10
Acetone	A	2500	170	600	ppbv	300	04/16/09 20:50
Benzene	A	3000	36	150	ppbv	300	04/16/09 20:50
Bromodichloromethane	A	ND	9	30	ppbv	60	04/24/09 00:10
Bromoform	A	ND	10	30	ppbv	60	04/24/09 00:10
Bromomethane	A	ND	11	30	ppbv	60	04/24/09 00:10
Carbon disulfide	A	ND	11	30	ppbv	60	04/24/09 00:10
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	04/24/09 00:10
Chlorobenzene	A	ND	9.6	30	ppbv	60	04/24/09 00:10
Chloroethane	A	100	10	30	ppbv	60	04/24/09 00:10
Chloroform	A	1000	7.2	30	ppbv	60	04/24/09 00:10
Chloromethane	A	ND	14	120	ppbv	60	04/24/09 00:10
cis-1,2-Dichloroethene	A	940	42	150	ppbv	300	04/16/09 20:50
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	04/24/09 00:10
Dibromochloromethane	A	ND	10	30	ppbv	60	04/24/09 00:10
Ethyl benzene	A	2700	54	150	ppbv	300	04/16/09 20:50
m,p-Xylene	A	11000	90	300	ppbv	300	04/16/09 20:50
Methylene chloride	A	5900	42	1200	ppbv	300	04/16/09 20:50
o-Xylene	A	4500	51	150	ppbv	300	04/16/09 20:50
Styrene	A	88	11	30	ppbv	60	04/24/09 00:10
Tetrachloroethene	A	4500	51	150	ppbv	300	04/16/09 20:50
Toluene	A	24000	540	1500	ppbv	3,00	04/17/09 01:01
trans-1,2-Dichloroethene	A	ND	19	30	ppbv	60	04/24/09 00:10
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	04/24/09 00:10
Trichloroethene	A	4200	48	150	ppbv	300	04/16/09 20:50
Vinyl chloride	A	120	9	30	ppbv	60	04/24/09 00:10
Surr: 4-Bromofluorobenzene	S	95.3	0	77.7-127	%REC	60	04/24/09 00:10

9/18/109



ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-07A
Collection Date: 04/13/09 14:20
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15			Prep Date/Time:		Analyst: MAK
1,1,1-Trichloroethane	A	12000	450	1500	ppbv	,00	04/17/09 01:45
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	04/24/09 00:55
1,1,2-Trichloroethane	A	62	10	30	ppbv	60	04/24/09 00:55
1,1-Dichloroethane	A	1400	42	150	ppbv	300	04/16/09 21:28
1,1-Dichloroethene	A	38	10	30	ppbv	60	04/24/09 00:55
1,2-Dichloroethane	A	240	10	30	ppbv	60	04/24/09 00:55
1,2-Dichloropropane	A	ND	8.4	30	ppbv	60	04/24/09 00:55
2-Butanone	A	2800	36	600	ppbv	300	04/16/09 21:28
2-Hexanone	A	ND	20	120	ppbv	60	04/24/09 00:55
4-Methyl-2-Pentanone	A	1400	72	150	ppbv	300	04/16/09 21:28
Acetone	A	2800	170	600	ppbv	300	04/16/09 21:28
Benzene	A	3300	36	150	ppbv	300	04/16/09 21:28
Bromodichloromethane	A	ND	9	30	ppbv	60	04/24/09 00:55
Bromoform	A	ND	10	30	ppbv	60	04/24/09 00:55
Bromomethane	A	ND	11	30	ppbv	60	04/24/09 00:55
Carbon disulfide	A	ND	11	30	ppbv	60	04/24/09 00:55
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	04/24/09 00:55
Chlorobenzene	A	ND	9.6	30	ppbv	60	04/24/09 00:55
Chloroethane	A	100	10	30	ppbv	60	04/24/09 00:55
Chloroform	A	1100	7.2	30	ppbv	60	04/24/09 00:55
Chloromethane	A	ND	14	120	ppbv	60	04/24/09 00:55
cis-1,2-Dichloroethene	A	1000	8.4	30	ppbv	60	04/24/09 00:55
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	04/24/09 00:55
Dibromochloromethane	A	ND	10	30	ppbv	60	04/24/09 00:55
Ethyl benzene	A	3000	54	150	ppbv	300	04/16/09 21:28
m,p-Xylene	A	17000	900	3000	ppbv	,00	04/17/09 01:45
Methylene chloride	A	11000	420	6000	ppbv	,00	04/17/09 01:45
o-Xylene	A	5000	51	150	ppbv	300	04/16/09 21:28
Styrene	A	120	11	30	ppbv	60	04/24/09 00:55
Tetrachloroethene	A	4900	51	150	ppbv	300	04/16/09 21:28
Toluene	A	30000	540	1500	ppbv	,00	04/17/09 01:45
trans-1,2-Dichloroethene	A	ND	19	30	ppbv	60	04/24/09 00:55
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	04/24/09 00:55
Trichloroethene	A	4600	48	150	ppbv	300	04/16/09 21:28
Vinyl chloride	A	110	9	30	ppbv	60	04/24/09 00:55
Surr: 4-Bromofluorobenzene	S	103	0	77.7-127	%REC	60	04/24/09 00:55

ANALYTICAL RESULTS

Date: Wednesday, May 06, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904506-08A
Collection Date: 04/13/09 14:00
Date Received: 04/13/09 00:00

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method: TO-15		Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	120	6.2	21	ppbv	50	04/15/09 01:39	
1,1,2,2-Tetrachloroethane	A	0.27	0.22	0.50	J	ppbv	1	04/15/09 02:24
1,1,2-Trichloroethane	A	1.9	0.17	0.50		ppbv	1	04/15/09 02:24
1,1-Dichloroethane	A	36	0.69	2.5		ppbv	5	04/14/09 23:25
1,1-Dichloroethene	A	61	0.84	2.5		ppbv	5	04/14/09 23:25
1,2-Dichloroethane	A	6.6	0.17	0.50		ppbv	1	04/15/09 02:24
1,2-Dichloropropane	A	1.6	0.14	0.50		ppbv	1	04/15/09 02:24
2-Butanone	A	34	0.59	9.9		ppbv	5	04/14/09 23:25
2-Hexanone	A	0.75	0.34	2.0	J	ppbv	1	04/15/09 02:24
4-Methyl-2-Pentanone	A	13	0.24	0.50		ppbv	1	04/15/09 02:24
Acetone	A	54	2.8	9.9		ppbv	5	04/14/09 23:25
Benzene	A	82	5	21		ppbv	50	04/15/09 01:39
Bromodichloromethane	A	ND	0.15	0.50		ppbv	1	04/15/09 02:24
Bromoform	A	ND	0.17	0.50		ppbv	1	04/15/09 02:24
Bromomethane	A	0.37	0.19	0.50	J	ppbv	1	04/15/09 02:24
Carbon disulfide	A	ND	0.18	0.50		ppbv	1	04/15/09 02:24
Carbon tetrachloride	A	0.45	0.16	0.50	J	ppbv	1	04/15/09 02:24
Chlorobenzene	A	1.7	0.16	0.50		ppbv	1	04/15/09 02:24
Chloroethane	A	1.7	0.17	0.50		ppbv	1	04/15/09 02:24
Chloroform	A	37	0.59	2.5		ppbv	5	04/14/09 23:25
Chloromethane	A	3.3	0.23	2.0		ppbv	1	04/15/09 02:24
cis-1,2-Dichloroethene	A	26	0.69	2.5		ppbv	5	04/14/09 23:25
cis-1,3-Dichloropropene	A	ND	0.14	0.50		ppbv	1	04/15/09 02:24
Dibromochloromethane	A	ND	0.17	0.50		ppbv	1	04/15/09 02:24
Ethyl benzene	A	49	0.89	2.5		ppbv	5	04/14/09 23:25
m,p-Xylene	A	180	1.5	5.0		ppbv	5	04/14/09 23:25
Methylene chloride	A	98	5.8	83		ppbv	50	04/15/09 01:39
o-Xylene	A	73	0.84	2.5		ppbv	5	04/14/09 23:25
Styrene	A	32	0.94	2.5		ppbv	5	04/14/09 23:25
Tetrachloroethene	A	110	7.1	21		ppbv	50	04/15/09 01:39
Toluene	A	270	7.5	21		ppbv	50	04/15/09 01:39
trans-1,2-Dichloroethene	A	4.2	0.31	0.50		ppbv	1	04/15/09 02:24
trans-1,3-Dichloropropene	A	ND	0.12	0.50		ppbv	1	04/15/09 02:24
Trichloroethene	A	84	6.6	21		ppbv	50	04/15/09 01:39
Vinyl chloride	A	15	0.15	0.50		ppbv	1	04/15/09 02:24
Surr: 4-Bromofluorobenzene	S	94.4	0	77.7-127		%REC	1	04/15/09 02:24

G72109

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-01A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	05/01/09 23:00
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/01/09 23:00
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/01/09 23:00
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/01/09 23:00
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/01/09 23:00
2,4-Dinitrophenol	A	ND	9.4	50	UJ	µg, Total	1	05/01/09 23:00
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	05/01/09 23:00
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	05/01/09 23:00
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/01/09 23:00
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/01/09 23:00
2-Nitroaniline	A	ND	1	50		µg, Total	1	05/01/09 23:00
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/01/09 23:00
3,3'-Dichlorobenzidine	A	ND	0.7	50	UJ	µg, Total	1	05/01/09 23:00
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	05/01/09 23:00
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/01/09 23:00
4,6-Dinitro-2-methylphenol	A	ND	1.1	50	UJ	µg, Total	1	05/01/09 23:00
4-Bromophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/01/09 23:00
4-Chloroaniline	A	ND	1	10		µg, Total	1	05/01/09 23:00
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	05/01/09 23:00
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/01/09 23:00
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	05/01/09 23:00
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10		µg, Total	1	05/01/09 23:00
Butyl benzyl phthalate	A	ND	1	10	UJ	µg, Total	1	05/01/09 23:00
Carbazole	A	ND	1.2	10		µg, Total	1	05/01/09 23:00
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/01/09 23:00
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/01/09 23:00
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/01/09 23:00
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/01/09 23:00
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/01/09 23:00
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	05/01/09 23:00

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

17/01/09

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-01A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10	µg, Total	1	05/01/09 23:00	
Hexachlorocyclopentadiene	A	ND	0.6	10	µg, Total	1	05/01/09 23:00	
Hexachloroethane	A	ND	0.9	10	µg, Total	1	05/01/09 23:00	
Isophorone	A	ND	1	10	µg, Total	1	05/01/09 23:00	
N-Nitrosodi-n-propylamine	A	ND	1	10	µg, Total	1	05/01/09 23:00	
N-Nitrosodiphenylamine	A	ND	0.7	10	µg, Total	1	05/01/09 23:00	
Nitrobenzene	A	ND	1	10	µg, Total	1	05/01/09 23:00	
Pentachlorophenol	A	ND	1.3	50	µg, Total	1	05/01/09 23:00	
Phenol	A	ND	0.4	10	µg, Total	1	05/01/09 23:00	
Surr: 2,4,6-Tribromophenol	S	51.6	0	40.5-97	%REC	1	05/01/09 23:00	
Surr: 2-Fluorobiphenyl	S	35.3	0	32.7-83.2	%REC	1	05/01/09 23:00	
Surr: 2-Fluorophenol	S	43.6	0	20.5-87.9	%REC	1	05/01/09 23:00	
Surr: Nitrobenzene-d5	S	37.6	0	33.7-77.1	%REC	1	05/01/09 23:00	
Surr: Phenol-d5	S	43.0	0	32.7-80.9	%REC	1	05/01/09 23:00	
Surr: Terphenyl-d14	S	29.4	0	22.7-96.5	%REC	1	05/01/09 23:00	

PAHS BY GC/MS-SIM		Method: TO-13 Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0	µg, Total	1	05/01/09 23:00	
Acenaphthylene	A	ND	0.22	1.0	µg, Total	1	05/01/09 23:00	
Anthracene	A	ND	0.27	1.0	µg, Total	1	05/01/09 23:00	
Benzo[a]anthracene	A	ND	0.47	1.0	µg, Total	1	05/01/09 23:00	
Benzo[a]pyrene	A	ND	0.38	1.0	µg, Total	1	05/01/09 23:00	
Benzo[b]fluoranthene	A	ND	0.44	1.0	µg, Total	1	05/01/09 23:00	
Benzo[g,h,i]perylene	A	ND	0.72	1.0	µg, Total	1	05/01/09 23:00	
Benzo[k]fluoranthene	A	ND	0.8	1.0	µg, Total	1	05/01/09 23:00	
Chrysene	A	ND	0.57	1.0	µg, Total	1	05/01/09 23:00	
Dibenz[a,h]anthracene	A	ND	0.54	1.0	µg, Total	1	05/01/09 23:00	
Fluoranthene	A	ND	0.39	1.0	µg, Total	1	05/01/09 23:00	
Fluorene	A	ND	0.25	1.0	µg, Total	1	05/01/09 23:00	
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0	µg, Total	1	05/01/09 23:00	
Naphthalene	A	2.0	0.16	1.0	µg, Total	1	05/01/09 23:00	
Phenanthrene	A	ND	0.27	1.0	µg, Total	1	05/01/09 23:00	
Pyrene	A	ND	0.44	1.0	µg, Total	1	05/01/09 23:00	
Surr: Nitrobenzene-d5	S	37.6	0	33.7-77.1	%REC	1	05/01/09 23:00	
Surr: 2-Fluorobiphenyl	S	35.3	0	32.7-83.2	%REC	1	05/01/09 23:00	
Surr: Terphenyl-d14	S	29.4	0	22.7-96.5	%REC	1	05/01/09 23:00	

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-02A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method:	TO-13MOD			Prep Date/Time:	04/29/09 10:30	Analyst:	BEM
1,2,4-Trichlorobenzene	A	ND	0.9	10	UJ	µg, Total	1	05/01/09 23:18
1,2-Dichlorobenzene	A	1.2	0.7	10	J	µg, Total	1	05/01/09 23:18
1,3-Dichlorobenzene	A	ND	0.8	10	UJ	µg, Total	1	05/01/09 23:18
1,4-Dichlorobenzene	A	ND	0.9	10	↓	µg, Total	1	05/01/09 23:18
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/01/09 23:18
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/01/09 23:18
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/01/09 23:18
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/01/09 23:18
2,4-Dinitrophenol	A	ND	9.4	50	UJ	µg, Total	1	05/01/09 23:18
2,4-Dinitrotoluene	A	ND	0.8	10	UJ	µg, Total	1	05/01/09 23:18
2,6-Dinitrotoluene	A	ND	1.1	10	↓	µg, Total	1	05/01/09 23:18
2-Chloronaphthalene	A	ND	0.9	10	↓	µg, Total	1	05/01/09 23:18
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/01/09 23:18
2-Methylnaphthalene	A	ND	0.9	10	UJ	µg, Total	1	05/01/09 23:18
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/01/09 23:18
2-Nitroaniline	A	ND	1	50	UJ	µg, Total	1	05/01/09 23:18
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/01/09 23:18
3,3'-Dichlorobenzidine	A	ND	0.7	50	UJ	µg, Total	1	05/01/09 23:18
3-Nitroaniline	A	ND	1.3	50	↓	µg, Total	1	05/01/09 23:18
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/01/09 23:18
4,6-Dinitro-2-methylphenol	A	ND	1.1	50	UJ	µg, Total	1	05/01/09 23:18
4-Bromophenyl phenyl ether	A	ND	0.9	10	UJ	µg, Total	1	05/01/09 23:18
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/01/09 23:18
4-Chloroaniline	A	ND	1	10	UJ	µg, Total	1	05/01/09 23:18
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/01/09 23:18
4-Nitroaniline	A	ND	1.7	50	↓	µg, Total	1	05/01/09 23:18
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/01/09 23:18
Bis(2-chloroethoxy)methane	A	ND	1	10	UJ	µg, Total	1	05/01/09 23:18
Bis(2-chloroethyl)ether	A	ND	0.9	10	↓	µg, Total	1	05/01/09 23:18
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/01/09 23:18
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10		µg, Total	1	05/01/09 23:18
Butyl benzyl phthalate	A	ND	1	10		µg, Total	1	05/01/09 23:18
Carbazole	A	ND	1.2	10		µg, Total	1	05/01/09 23:18
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/01/09 23:18
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/01/09 23:18
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/01/09 23:18
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/01/09 23:18
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/01/09 23:18
Hexachlorobenzene	A	ND	0.9	10	↓	µg, Total	1	05/01/09 23:18

8/17/09

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-02A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10	✓	µg, Total	1	05/01/09 23:18
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/01/09 23:18
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/01/09 23:18
Isophorone	A	ND	1	10		µg, Total	1	05/01/09 23:18
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/01/09 23:18
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/01/09 23:18
Nitrobenzene	A	ND	1	10	✓	µg, Total	1	05/01/09 23:18
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/01/09 23:18
Phenol	A	ND	0.4	10		µg, Total	1	05/01/09 23:18
Surr: 2,4,6-Tribromophenol	S	54.8	0	40.5-97		%REC	1	05/01/09 23:18
Surr: 2-Fluorobiphenyl	S	27.9	0	32.7-83.2	S	%REC	1	05/01/09 23:18
Surr: 2-Fluorophenol	S	34.8	0	20.5-87.9		%REC	1	05/01/09 23:18
Surr: Nitrobenzene-d5	S	28.8	0	33.7-77.1	S	%REC	1	05/01/09 23:18
Surr: Phenol-d5	S	35.8	0	32.7-80.9		%REC	1	05/01/09 23:18
Surr: Terphenyl-d14	S	31.7	0	22.7-96.5		%REC	1	05/01/09 23:18

PAHS BY GC/MS-SIM		Method: TO-13 Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0	✓	µg, Total	1	05/01/09 23:18
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/01/09 23:18
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/01/09 23:18
Benz[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/01/09 23:18
Benz[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/01/09 23:18
Benz[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/01/09 23:18
Benz[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/01/09 23:18
Benz[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/01/09 23:18
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/01/09 23:18
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/01/09 23:18
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/01/09 23:18
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/01/09 23:18
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/01/09 23:18
Naphthalene	A	ND	0.16	1.0		µg, Total	1	05/01/09 23:18
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/01/09 23:18
Pyrene	A	ND	0.44	1.0	✓	µg, Total	1	05/01/09 23:18
Surr: Nitrobenzene-d5	S	28.8	0	33.7-77.1	S	%REC	1	05/01/09 23:18
Surr: 2-Fluorobiphenyl	S	27.9	0	32.7-83.2	S	%REC	1	05/01/09 23:18
Surr: Terphenyl-d14	S	31.7	0	22.7-96.5		%REC	1	05/01/09 23:18

4/18/09

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-03A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method:	Prep Date/Time: 04/29/09 10:30 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
1,2-Dichlorobenzene	A	ND	0.7	10	µg, Total	1	05/01/09 23:35	
1,3-Dichlorobenzene	A	ND	0.8	10	µg, Total	1	05/01/09 23:35	
1,4-Dichlorobenzene	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
2,4,5-Trichlorophenol	A	ND	1.5	10	µg, Total	1	05/01/09 23:35	
2,4,6-Trichlorophenol	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
2,4-Dichlorophenol	A	ND	0.7	10	µg, Total	1	05/01/09 23:35	
2,4-Dimethylphenol	A	ND	0.8	10	µg, Total	1	05/01/09 23:35	
2,4-Dinitrophenol	A	ND	9.4	50	UJ	µg, Total	1	05/01/09 23:35
2,4-Dinitrotoluene	A	ND	0.8	10	µg, Total	1	05/01/09 23:35	
2,6-Dinitrotoluene	A	ND	1.1	10	µg, Total	1	05/01/09 23:35	
2-Chloronaphthalene	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
2-Chlorophenol	A	ND	0.7	10	µg, Total	1	05/01/09 23:35	
2-Methylnaphthalene	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
2-Methylphenol	A	ND	0.7	10	µg, Total	1	05/01/09 23:35	
2-Nitroaniline	A	ND	1	50	UJ	µg, Total	1	05/01/09 23:35
2-Nitrophenol	A	ND	1	10	µg, Total	1	05/01/09 23:35	
3,3'-Dichlorobenzidine	A	ND	0.7	50	UJ	µg, Total	1	05/01/09 23:35
3-Nitroaniline	A	ND	1.3	50	UJ	µg, Total	1	05/01/09 23:35
3/4-Methylphenol	A	ND	0.8	10	µg, Total	1	05/01/09 23:35	
4,6-Dinitro-2-methylphenol	A	ND	1.1	50	UJ	µg, Total	1	05/01/09 23:35
4-Bromophenyl phenyl ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
4-Chloro-3-methylphenol	A	ND	1.2	20	µg, Total	1	05/01/09 23:35	
4-Chloroaniline	A	ND	1	10	µg, Total	1	05/01/09 23:35	
4-Chlorophenyl phenyl ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
4-Nitroaniline	A	ND	1.7	50	UJ	µg, Total	1	05/01/09 23:35
4-Nitrophenol	A	ND	4.3	50	UJ	µg, Total	1	05/01/09 23:35
Bis(2-chloroethoxy)methane	A	ND	1	10	µg, Total	1	05/01/09 23:35	
Bis(2-chloroethyl)ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
Bis(2-chloroisopropyl)ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
Bis(2-ethylhexyl)phthalate	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
Butyl benzyl phthalate	A	ND	1.1	10	µg, Total	1	05/01/09 23:35	
Carbazole	A	ND	1	10	UJ	µg, Total	1	05/01/09 23:35
Di-n-butyl phthalate	A	ND	1.2	10	µg, Total	1	05/01/09 23:35	
Di-n-octyl phthalate	A	ND	1.1	10	µg, Total	1	05/01/09 23:35	
Dibenzofuran	A	ND	0.8	10	µg, Total	1	05/01/09 23:35	
Diethyl phthalate	A	ND	1.1	10	µg, Total	1	05/01/09 23:35	
Dimethyl phthalate	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	
Hexachlorobenzene	A	ND	0.9	10	µg, Total	1	05/01/09 23:35	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

F170709

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-03A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/01/09 23:35
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/01/09 23:35
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/01/09 23:35
Isophorone	A	ND	1	10		µg, Total	1	05/01/09 23:35
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/01/09 23:35
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/01/09 23:35
Nitrobenzene	A	ND	1	10		µg, Total	1	05/01/09 23:35
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/01/09 23:35
Phenol	A	ND	0.4	10		µg, Total	1	05/01/09 23:35
Surr: 2,4,6-Tribromophenol	S	59.8	0	40.5-97		%REC	1	05/01/09 23:35
Surr: 2-Fluorobiphenyl	S	39.6	0	32.7-83.2		%REC	1	05/01/09 23:35
Surr: 2-Fluorophenol	S	48.3	0	20.5-87.9		%REC	1	05/01/09 23:35
Surr: Nitrobenzene-d5	S	41.3	0	33.7-77.1		%REC	1	05/01/09 23:35
Surr: Phenol-d5	S	49.4	0	32.7-80.9		%REC	1	05/01/09 23:35
Surr: Terphenyl-d14	S	30.2	0	22.7-96.5		%REC	1	05/01/09 23:35

PAHS BY GC/MS-SIM		Method: TO-13 Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/01/09 23:35
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/01/09 23:35
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/01/09 23:35
Benz[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/01/09 23:35
Benz[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/01/09 23:35
Benz[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/01/09 23:35
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/01/09 23:35
Benzo[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/01/09 23:35
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/01/09 23:35
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/01/09 23:35
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/01/09 23:35
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/01/09 23:35
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/01/09 23:35
Naphthalene	A	ND	0.16	1.0		µg, Total	1	05/01/09 23:35
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/01/09 23:35
Pyrene	A	ND	0.44	1.0		µg, Total	1	05/01/09 23:35
Surr: Nitrobenzene-d5	S	41.3	0	33.7-77.1		%REC	1	05/01/09 23:35
Surr: 2-Fluorobiphenyl	S	39.6	0	32.7-83.2		%REC	1	05/01/09 23:35
Surr: Terphenyl-d14	S	30.2	0	22.7-96.5		%REC	1	05/01/09 23:35

5/10/09

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-04A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method:	Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
1,2,4-Trichlorobenzene	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
1,2-Dichlorobenzene	A	ND	0.7	10	µg, Total	1	05/01/09 23:53	
1,3-Dichlorobenzene	A	ND	0.8	10	µg, Total	1	05/01/09 23:53	
1,4-Dichlorobenzene	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
2,4,5-Trichlorophenol	A	ND	1.5	10	µg, Total	1	05/01/09 23:53	
2,4,6-Trichlorophenol	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
2,4-Dichlorophenol	A	ND	0.7	10	µg, Total	1	05/01/09 23:53	
2,4-Dimethylphenol	A	ND	0.8	10	µg, Total	1	05/01/09 23:53	
2,4-Dinitrophenol	A	ND	9.4	50	µg, Total	1	05/01/09 23:53	
2,4-Dinitrotoluene	A	ND	0.8	10	µg, Total	1	05/01/09 23:53	
2,6-Dinitrotoluene	A	ND	1.1	10	µg, Total	1	05/01/09 23:53	
2-Chloronaphthalene	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
2-Chlorophenol	A	ND	0.7	10	µg, Total	1	05/01/09 23:53	
2-Methylnaphthalene	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
2-Methylphenol	A	ND	0.7	10	µg, Total	1	05/01/09 23:53	
2-Nitroaniline	A	ND	1	50	µg, Total	1	05/01/09 23:53	
2-Nitrophenol	A	ND	1	10	µg, Total	1	05/01/09 23:53	
3,3'-Dichlorobenzidine	A	ND	0.7	50	µg, Total	1	05/01/09 23:53	
3-Nitroaniline	A	ND	1.3	50	µg, Total	1	05/01/09 23:53	
3/4-Methylphenol	A	ND	0.8	10	µg, Total	1	05/01/09 23:53	
4,6-Dinitro-2-methylphenol	A	ND	1.1	50	µg, Total	1	05/01/09 23:53	
4-Bromophenyl phenyl ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
4-Chloro-3-methylphenol	A	ND	1.2	20	µg, Total	1	05/01/09 23:53	
4-Chloroaniline	A	ND	1	10	µg, Total	1	05/01/09 23:53	
4-Chlorophenyl phenyl ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
4-Nitroaniline	A	ND	1.7	50	µg, Total	1	05/01/09 23:53	
4-Nitrophenol	A	ND	4.3	50	µg, Total	1	05/01/09 23:53	
Bis(2-chloroethoxy)methane	A	ND	1	10	µg, Total	1	05/01/09 23:53	
Bis(2-chloroethyl)ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
Bis(2-chloroisopropyl)ether	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	µg, Total	1	05/01/09 23:53	
Butyl benzyl phthalate	A	ND	1	10	µg, Total	1	05/01/09 23:53	
Carbazole	A	ND	1.2	10	µg, Total	1	05/01/09 23:53	
Di-n-butyl phthalate	A	ND	1.2	10	µg, Total	1	05/01/09 23:53	
Di-n-octyl phthalate	A	ND	1.1	10	µg, Total	1	05/01/09 23:53	
Dibenzofuran	A	ND	0.8	10	µg, Total	1	05/01/09 23:53	
Diethyl phthalate	A	ND	1.1	10	µg, Total	1	05/01/09 23:53	
Dimethyl phthalate	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	
Hexachlorobenzene	A	ND	0.9	10	µg, Total	1	05/01/09 23:53	

9/1/2009

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-04A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
								Prep Date/Time: 04/29/09 10:30 Analyst: BEM
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/01/09 23:53
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/01/09 23:53
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/01/09 23:53
Isophorone	A	ND	1	10		µg, Total	1	05/01/09 23:53
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/01/09 23:53
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/01/09 23:53
Nitrobenzene	A	ND	1	10		µg, Total	1	05/01/09 23:53
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/01/09 23:53
Phenol	A	ND	0.4	10		µg, Total	1	05/01/09 23:53
Surr: 2,4,6-Tribromophenol	S	55.0	0	40.5-97		%REC	1	05/01/09 23:53
Surr: 2-Fluorobiphenyl	S	32.2	0	32.7-83.2	S	%REC	1	05/01/09 23:53
Surr: 2-Fluorophenol	S	39.1	0	20.5-87.9		%REC	1	05/01/09 23:53
Surr: Nitrobenzene-d5	S	33.9	0	33.7-77.1		%REC	1	05/01/09 23:53
Surr: Phenol-d5	S	40.0	0	32.7-80.9		%REC	1	05/01/09 23:53
Surr: Terphenyl-d14	S	32.8	0	22.7-96.5		%REC	1	05/01/09 23:53

PAHS BY GC/MS-SIM		Method: TO-13						
								Prep Date/Time: 04/29/09 10:30 Analyst: BEM
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/01/09 23:53
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/01/09 23:53
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/01/09 23:53
Benzo[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/01/09 23:53
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/01/09 23:53
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/01/09 23:53
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/01/09 23:53
Benzo[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/01/09 23:53
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/01/09 23:53
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/01/09 23:53
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/01/09 23:53
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/01/09 23:53
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/01/09 23:53
Naphthalene	A	ND	0.16	1.0		µg, Total	1	05/01/09 23:53
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/01/09 23:53
Pyrene	A	ND	0.44	1.0		µg, Total	1	05/01/09 23:53
Surr: Nitrobenzene-d5	S	33.9	0	33.7-77.1		%REC	1	05/01/09 23:53
Surr: 2-Fluorobiphenyl	S	32.2	0	32.7-83.2	S	%REC	1	05/01/09 23:53
Surr: Terphenyl-d14	S	32.8	0	22.7-96.5		%REC	1	05/01/09 23:53

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-05A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method:	TO-13MOD	Prep Date/Time: 04/29/09 10:30 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
1,2-Dichlorobenzene	A	ND	0.7	10	µg, Total	1	05/02/09 00:10	
1,3-Dichlorobenzene	A	ND	0.8	10	µg, Total	1	05/02/09 00:10	
1,4-Dichlorobenzene	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
2,4,5-Trichlorophenol	A	ND	1.5	10	µg, Total	1	05/02/09 00:10	
2,4,6-Trichlorophenol	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
2,4-Dichlorophenol	A	ND	0.7	10	µg, Total	1	05/02/09 00:10	
2,4-Dimethylphenol	A	ND	0.8	10	µg, Total	1	05/02/09 00:10	
2,4-Dinitrophenol	A	ND	9.4	50	µg, Total	1	05/02/09 00:10	
2,4-Dinitrotoluene	A	ND	0.8	10	µg, Total	1	05/02/09 00:10	
2,6-Dinitrotoluene	A	ND	1.1	10	µg, Total	1	05/02/09 00:10	
2-Chloronaphthalene	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
2-Chlorophenol	A	ND	0.7	10	µg, Total	1	05/02/09 00:10	
2-Methylnaphthalene	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
2-Methylphenol	A	ND	0.7	10	µg, Total	1	05/02/09 00:10	
2-Nitroaniline	A	ND	1	50	µg, Total	1	05/02/09 00:10	
2-Nitrophenol	A	ND	1	10	µg, Total	1	05/02/09 00:10	
3,3'-Dichlorobenzidine	A	ND	0.7	50	µg, Total	1	05/02/09 00:10	
3-Nitroaniline	A	ND	1.3	50	µg, Total	1	05/02/09 00:10	
3/4-Methylphenol	A	ND	0.8	10	µg, Total	1	05/02/09 00:10	
4,6-Dinitro-2-methylphenol	A	ND	1.1	50	µg, Total	1	05/02/09 00:10	
4-Bromophenyl phenyl ether	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
4-Chloro-3-methylphenol	A	ND	1.2	20	µg, Total	1	05/02/09 00:10	
4-Chloroaniline	A	ND	1	10	µg, Total	1	05/02/09 00:10	
4-Chlorophenyl phenyl ether	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
4-Nitroaniline	A	ND	1.7	50	µg, Total	1	05/02/09 00:10	
4-Nitrophenol	A	ND	4.3	50	µg, Total	1	05/02/09 00:10	
Bis(2-chloroethoxy)methane	A	ND	1	10	µg, Total	1	05/02/09 00:10	
Bis(2-chloroethyl)ether	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
Bis(2-chloroisopropyl)ether	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	µg, Total	1	05/02/09 00:10	
Butyl benzyl phthalate	A	ND	1	10	µg, Total	1	05/02/09 00:10	
Carbazole	A	ND	1.2	10	µg, Total	1	05/02/09 00:10	
Di-n-butyl phthalate	A	ND	1.2	10	µg, Total	1	05/02/09 00:10	
Di-n-octyl phthalate	A	ND	1.1	10	µg, Total	1	05/02/09 00:10	
Dibenzofuran	A	ND	0.8	10	µg, Total	1	05/02/09 00:10	
Diethyl phthalate	A	ND	1.1	10	µg, Total	1	05/02/09 00:10	
Dimethyl phthalate	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
Hexachlorobenzene	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

MAY 10 2009



ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-05A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD		Prep Date/Time: 04/29/09 10:30 Analyst: BEM				
Hexachlorobutadiene	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
Hexachlorocyclopentadiene	A	ND	0.6	10	µg, Total	1	05/02/09 00:10	
Hexachloroethane	A	ND	0.9	10	µg, Total	1	05/02/09 00:10	
Isophorone	A	ND	1	10	µg, Total	1	05/02/09 00:10	
N-Nitrosodi-n-propylamine	A	ND	1	10	µg, Total	1	05/02/09 00:10	
N-Nitrosodiphenylamine	A	ND	0.7	10	µg, Total	1	05/02/09 00:10	
Nitrobenzene	A	ND	1	10	µg, Total	1	05/02/09 00:10	
Pentachlorophenol	A	ND	1.3	50	µg, Total	1	05/02/09 00:10	
Phenol	A	ND	0.4	10	µg, Total	1	05/02/09 00:10	
Surr: 2,4,6-Tribromophenol	S	53.3	0	40.5-97	%REC	1	05/02/09 00:10	
Surr: 2-Fluorobiphenyl	S	36.5	0	32.7-83.2	%REC	1	05/02/09 00:10	
Surr: 2-Fluorophenol	S	45.4	0	20.5-87.9	%REC	1	05/02/09 00:10	
Surr: Nitrobenzene-d5	S	39.1	0	33.7-77.1	%REC	1	05/02/09 00:10	
Surr: Phenol-d5	S	44.1	0	32.7-80.9	%REC	1	05/02/09 00:10	
Surr: Terphenyl-d14	S	29.0	0	22.7-96.5	%REC	1	05/02/09 00:10	

PAHS BY GC/MS-SIM		Method: TO-13		Prep Date/Time: 04/29/09 10:30 Analyst: BEM				
Acenaphthene	A	ND	0.21	1.0	µg, Total	1	05/02/09 00:10	
Acenaphthylene	A	ND	0.22	1.0	µg, Total	1	05/02/09 00:10	
Anthracene	A	ND	0.27	1.0	µg, Total	1	05/02/09 00:10	
Benzo[a]anthracene	A	ND	0.47	1.0	µg, Total	1	05/02/09 00:10	
Benzo[a]pyrene	A	ND	0.38	1.0	µg, Total	1	05/02/09 00:10	
Benzo[b]fluoranthene	A	ND	0.44	1.0	µg, Total	1	05/02/09 00:10	
Benzo[g,h,i]perylene	A	ND	0.72	1.0	µg, Total	1	05/02/09 00:10	
Benzo[k]fluoranthene	A	ND	0.8	1.0	µg, Total	1	05/02/09 00:10	
Chrysene	A	ND	0.57	1.0	µg, Total	1	05/02/09 00:10	
Dibenz[a,h]anthracene	A	ND	0.54	1.0	µg, Total	1	05/02/09 00:10	
Fluoranthene	A	ND	0.39	1.0	µg, Total	1	05/02/09 00:10	
Fluorene	A	ND	0.25	1.0	µg, Total	1	05/02/09 00:10	
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0	µg, Total	1	05/02/09 00:10	
Naphthalene	A	ND	0.16	1.0	µg, Total	1	05/02/09 00:10	
Phenanthrene	A	ND	0.27	1.0	µg, Total	1	05/02/09 00:10	
Pyrene	A	ND	0.44	1.0	µg, Total	1	05/02/09 00:10	
Surr: Nitrobenzene-d5	S	39.1	0	33.7-77.1	%REC	1	05/02/09 00:10	
Surr: 2-Fluorobiphenyl	S	36.5	0	32.7-83.2	%REC	1	05/02/09 00:10	
Surr: Terphenyl-d14	S	29.0	0	22.7-96.5	%REC	1	05/02/09 00:10	

ANALYTICAL RESULTS

Date:

Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-06A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
		A	ND	0.9	10	µg, Total	1	05/02/09 00:28
1,2,4-Trichlorobenzene		A	2.7	0.7	10	J	µg, Total	1 05/02/09 00:28
1,2-Dichlorobenzene		A	ND	0.8	10		µg, Total	1 05/02/09 00:28
1,3-Dichlorobenzene		A	ND	0.9	10	J	µg, Total	1 05/02/09 00:28
1,4-Dichlorobenzene		A	ND	1.5	10		µg, Total	1 05/02/09 00:28
2,4,5-Trichlorophenol		A	ND	0.9	10		µg, Total	1 05/02/09 00:28
2,4,6-Trichlorophenol		A	ND	0.7	10		µg, Total	1 05/02/09 00:28
2,4-Dichlorophenol		A	ND	0.8	10		µg, Total	1 05/02/09 00:28
2,4-Dinitrophenol		A	ND	9.4	50	WJ	µg, Total	1 05/02/09 00:28
2,4-Dinitrotoluene		A	ND	0.8	10		µg, Total	1 05/02/09 00:28
2,6-Dinitrotoluene		A	ND	1.1	10		µg, Total	1 05/02/09 00:28
2-Chloronaphthalene		A	ND	0.9	10		µg, Total	1 05/02/09 00:28
2-Chlorophenol		A	ND	0.7	10		µg, Total	1 05/02/09 00:28
2-Methylnaphthalene		A	2.4	0.9	10	J	µg, Total	1 05/02/09 00:28
2-Methylphenol		A	ND	0.7	10		µg, Total	1 05/02/09 00:28
2-Nitroaniline		A	ND	1	50		µg, Total	1 05/02/09 00:28
2-Nitrophenol		A	ND	1	10		µg, Total	1 05/02/09 00:28
3,3'-Dichlorobenzidine		A	ND	0.7	50	WJ	µg, Total	1 05/02/09 00:28
3-Nitroaniline		A	ND	1.3	50		µg, Total	1 05/02/09 00:28
3/4-Methylphenol		A	ND	0.8	10		µg, Total	1 05/02/09 00:28
4,6-Dinitro-2-methylphenol		A	ND	1.1	50	WJ	µg, Total	1 05/02/09 00:28
4-Bromophenyl phenyl ether		A	ND	0.9	10		µg, Total	1 05/02/09 00:28
4-Chloro-3-methylphenol		A	ND	1.2	20		µg, Total	1 05/02/09 00:28
4-Chloroaniline		A	ND	1	10		µg, Total	1 05/02/09 00:28
4-Chlorophenyl phenyl ether		A	ND	0.9	10		µg, Total	1 05/02/09 00:28
4-Nitroaniline		A	ND	1.7	50		µg, Total	1 05/02/09 00:28
4-Nitrophenol		A	ND	4.3	50		µg, Total	1 05/02/09 00:28
Bis(2-chloroethoxy)methane		A	ND	1	10		µg, Total	1 05/02/09 00:28
Bis(2-chloroethyl)ether		A	ND	0.9	10		µg, Total	1 05/02/09 00:28
Bis(2-chloroisopropyl)ether		A	ND	0.9	10		µg, Total	1 05/02/09 00:28
Bis(2-ethylhexyl)phthalate		A	ND	1.1	10		µg, Total	1 05/02/09 00:28
Butyl benzyl phthalate		A	ND	1	10	WJ	µg, Total	1 05/02/09 00:28
Carbazole		A	ND	1.2	10		µg, Total	1 05/02/09 00:28
Di-n-butyl phthalate		A	ND	1.2	10		µg, Total	1 05/02/09 00:28
Di-n-octyl phthalate		A	ND	1.1	10		µg, Total	1 05/02/09 00:28
Dibenzofuran		A	ND	0.8	10		µg, Total	1 05/02/09 00:28
Diethyl phthalate		A	ND	1.1	10		µg, Total	1 05/02/09 00:28
Dimethyl phthalate		A	ND	0.9	10		µg, Total	1 05/02/09 00:28
Hexachlorobenzene		A	ND	0.9	10		µg, Total	1 05/02/09 00:28

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-06A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/02/09 00:28
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/02/09 00:28
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/02/09 00:28
Isophorone	A	5.1	1	10	J	µg, Total	1	05/02/09 00:28
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/02/09 00:28
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/02/09 00:28
Nitrobenzene	A	ND	1	10		µg, Total	1	05/02/09 00:28
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/02/09 00:28
Phenol	A	1.8	0.4	10	Jb	µg, Total	1	05/02/09 00:28
Surr: 2,4,6-Tribromophenol	S	54.9	0	40.5-97		%REC	1	05/02/09 00:28
Surr: 2-Fluorobiphenyl	S	36.0	0	32.7-83.2		%REC	1	05/02/09 00:28
Surr: 2-Fluorophenol	S	45.1	0	20.5-87.9		%REC	1	05/02/09 00:28
Surr: Nitrobenzene-d5	S	38.2	0	33.7-77.1		%REC	1	05/02/09 00:28
Surr: Phenol-d5	S	45.5	0	32.7-80.9		%REC	1	05/02/09 00:28
Surr: Terphenyl-d14	S	33.2	0	22.7-96.5		%REC	1	05/02/09 00:28

10UB

PAHS BY GC/MS-SIM		Method: TO-13 Prep Date/Time: 04/29/09 10:30 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/02/09 00:28
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/02/09 00:28
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/02/09 00:28
Benzo[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/02/09 00:28
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/02/09 00:28
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/02/09 00:28
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/02/09 00:28
Benzo[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/02/09 00:28
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/02/09 00:28
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/02/09 00:28
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/02/09 00:28
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/02/09 00:28
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/02/09 00:28
Naphthalene	A	9.3	0.16	1.0		µg, Total	1	05/02/09 00:28
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/02/09 00:28
Pyrene	A	ND	0.44	1.0		µg, Total	1	05/02/09 00:28
Surr: Nitrobenzene-d5	S	38.2	0	33.7-77.1		%REC	1	05/02/09 00:28
Surr: 2-Fluorobiphenyl	S	36.0	0	32.7-83.2		%REC	1	05/02/09 00:28
Surr: Terphenyl-d14	S	33.2	0	22.7-96.5		%REC	1	05/02/09 00:28

ANALYTICAL RESULTS

Date:

Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-07A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method:	TO-13MOD	Prep Date/Time: 04/29/09 10:30 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
1,2-Dichlorobenzene	A	1.8	0.7	10	J	µg, Total	1	05/02/09 00:46
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/02/09 00:46
1,4-Dichlorobenzene	A	1.1	0.9	10	J	µg, Total	1	05/02/09 00:46
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/02/09 00:46
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/02/09 00:46
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/02/09 00:46
2,4-Dinitrophenol	A	ND	9.4	50	NJ	µg, Total	1	05/02/09 00:46
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	05/02/09 00:46
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	05/02/09 00:46
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/02/09 00:46
2-Methylnaphthalene	A	1	0.9	10	J	µg, Total	1	05/02/09 00:46
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/02/09 00:46
2-Nitroaniline	A	ND	1	50		µg, Total	1	05/02/09 00:46
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/02/09 00:46
3,3'-Dichlorobenzidine	A	ND	0.7	50	NJ	µg, Total	1	05/02/09 00:46
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	05/02/09 00:46
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/02/09 00:46
4,6-Dinitro-2-methylphenol	A	ND	1.1	50	NJ	µg, Total	1	05/02/09 00:46
4-Bromophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/02/09 00:46
4-Chloroaniline	A	ND	1	10		µg, Total	1	05/02/09 00:46
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	05/02/09 00:46
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/02/09 00:46
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	05/02/09 00:46
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10		µg, Total	1	05/02/09 00:46
Butyl benzyl phthalate	A	ND	1	10	NJ	µg, Total	1	05/02/09 00:46
Carbazole	A	ND	1.2	10		µg, Total	1	05/02/09 00:46
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/02/09 00:46
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/02/09 00:46
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/02/09 00:46
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/02/09 00:46
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	05/02/09 00:46

NJ/08/09

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-07A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
						Prep Date/Time: 04/29/09 10:30	Analyst: BEM	
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/02/09 00:46
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/02/09 00:46
Isophorone	A	2.7	1	10	J	µg, Total	1	05/02/09 00:46
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/02/09 00:46
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/02/09 00:46
Nitrobenzene	A	ND	1	10		µg, Total	1	05/02/09 00:46
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/02/09 00:46
Phenol	A	ND	0.4	10		µg, Total	1	05/02/09 00:46
Surr: 2,4,6-Tribromophenol	S	66.9	0	40.5-97		%REC	1	05/02/09 00:46
Surr: 2-Fluorobiphenyl	S	48.8	0	32.7-83.2		%REC	1	05/02/09 00:46
Surr: 2-Fluorophenol	S	56.0	0	20.5-87.9		%REC	1	05/02/09 00:46
Surr: Nitrobenzene-d5	S	50.4	0	33.7-77.1		%REC	1	05/02/09 00:46
Surr: Phenol-d5	S	53.9	0	32.7-80.9		%REC	1	05/02/09 00:46
Surr: Terphenyl-d14	S	37.5	0	22.7-96.5		%REC	1	05/02/09 00:46

PAHS BY GC/MS-SIM		Method: TO-13						
						Prep Date/Time: 04/29/09 10:30	Analyst: BEM	
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/02/09 00:46
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/02/09 00:46
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/02/09 00:46
Benzo[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/02/09 00:46
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/02/09 00:46
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/02/09 00:46
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/02/09 00:46
Benzo[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/02/09 00:46
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/02/09 00:46
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/02/09 00:46
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/02/09 00:46
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/02/09 00:46
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/02/09 00:46
Naphthalene	A	4.6	0.16	1.0		µg, Total	1	05/02/09 00:46
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/02/09 00:46
Pyrene	A	ND	0.44	1.0		µg, Total	1	05/02/09 00:46
Surr: Nitrobenzene-d5	S	50.4	0	33.7-77.1		%REC	1	05/02/09 00:46
Surr: 2-Fluorobiphenyl	S	48.8	0	32.7-83.2		%REC	1	05/02/09 00:46
Surr: Terphenyl-d14	S	37.5	0	22.7-96.5		%REC	1	05/02/09 00:46

5/8/09

ANALYTICAL RESULTS

Date: Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-08A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method: TO-13MOD		Prep Date/Time: 04/29/09 10:30 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
1,2-Dichlorobenzene	A	ND	0.7	10	μg, Total	1	05/02/09 01:03	
1,3-Dichlorobenzene	A	ND	0.8	10	μg, Total	1	05/02/09 01:03	
1,4-Dichlorobenzene	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
2,4,5-Trichlorophenol	A	ND	1.5	10	μg, Total	1	05/02/09 01:03	
2,4,6-Trichlorophenol	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
2,4-Dichlorophenol	A	ND	0.7	10	μg, Total	1	05/02/09 01:03	
2,4-Dimethylphenol	A	ND	0.8	10	μg, Total	1	05/02/09 01:03	
2,4-Dinitrophenol	A	ND	9.4	50	μg, Total	1	05/02/09 01:03	
2,4-Dinitrotoluene	A	ND	0.8	10	μg, Total	1	05/02/09 01:03	
2,6-Dinitrotoluene	A	ND	1.1	10	μg, Total	1	05/02/09 01:03	
2-Chloronaphthalene	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
2-Chlorophenol	A	ND	0.7	10	μg, Total	1	05/02/09 01:03	
2-Methylnaphthalene	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
2-Methylphenol	A	ND	0.7	10	μg, Total	1	05/02/09 01:03	
2-Nitroaniline	A	ND	1	50	μg, Total	1	05/02/09 01:03	
2-Nitrophenol	A	ND	1	10	μg, Total	1	05/02/09 01:03	
3,3'-Dichlorobenzidine	A	ND	0.7	50	μg, Total	1	05/02/09 01:03	
3-Nitroaniline	A	ND	1.3	50	μg, Total	1	05/02/09 01:03	
3/4-Methylphenol	A	ND	0.8	10	μg, Total	1	05/02/09 01:03	
4,6-Dinitro-2-methylphenol	A	ND	1.1	50	μg, Total	1	05/02/09 01:03	
4-Bromophenyl phenyl ether	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
4-Chloro-3-methylphenol	A	ND	1.2	20	μg, Total	1	05/02/09 01:03	
4-Chloroaniline	A	ND	1	10	μg, Total	1	05/02/09 01:03	
4-Chlorophenyl phenyl ether	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
4-Nitroaniline	A	ND	1.7	50	μg, Total	1	05/02/09 01:03	
4-Nitrophenol	A	ND	4.3	50	μg, Total	1	05/02/09 01:03	
Bis(2-chloroethoxy)methane	A	ND	1	10	μg, Total	1	05/02/09 01:03	
Bis(2-chloroethyl)ether	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
Bis(2-chloroisopropyl)ether	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	μg, Total	1	05/02/09 01:03	
Butyl benzyl phthalate	A	ND	1	10	μg, Total	1	05/02/09 01:03	
Carbazole	A	ND	1.2	10	μg, Total	1	05/02/09 01:03	
Di-n-butyl phthalate	A	ND	1.2	10	μg, Total	1	05/02/09 01:03	
Di-n-octyl phthalate	A	ND	1.1	10	μg, Total	1	05/02/09 01:03	
Dibenzofuran	A	ND	0.8	10	μg, Total	1	05/02/09 01:03	
Diethyl phthalate	A	ND	1.1	10	μg, Total	1	05/02/09 01:03	
Dimethyl phthalate	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	
Hexachlorobenzene	A	ND	0.9	10	μg, Total	1	05/02/09 01:03	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

6/18/09



ANALYTICAL RESULTS

Date:

Friday, May 08, 2009

Client: MWH, Inc.
Client Project: April 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0904909-08A
Collection Date: 04/23/09 00:00
Date Received: 04/23/09 13:05

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD		Prep Date/Time: 04/29/09 10:30 Analyst: BEM				
Hexachlorobutadiene	A	ND	0.9	10	µg, Total	1	05/02/09 01:03	
Hexachlorocyclopentadiene	A	ND	0.6	10	µg, Total	1	05/02/09 01:03	
Hexachloroethane	A	ND	0.9	10	µg, Total	1	05/02/09 01:03	
Isophorone	A	ND	1	10	µg, Total	1	05/02/09 01:03	
N-Nitrosodi-n-propylamine	A	ND	1	10	µg, Total	1	05/02/09 01:03	
N-Nitrosodiphenylamine	A	ND	0.7	10	µg, Total	1	05/02/09 01:03	
Nitrobenzene	A	ND	1	10	µg, Total	1	05/02/09 01:03	
Pentachlorophenol	A	ND	1.3	50	µg, Total	1	05/02/09 01:03	
Phenol	A	1.4	0.4	10	Jb	µg, Total	1	05/02/09 01:03
<i>Surr: 2,4,6-Tribromophenol</i>	S	55.4	0	40.5-97	%REC	1	05/02/09 01:03	10UB
<i>Surr: 2-Fluorobiphenyl</i>	S	30.6	0	32.7-83.2	S	%REC	1	05/02/09 01:03
<i>Surr: 2-Fluorophenol</i>	S	36.9	0	20.5-87.9	%REC	1	05/02/09 01:03	
<i>Surr: Nitrobenzene-d5</i>	S	32.5	0	33.7-77.1	S	%REC	1	05/02/09 01:03
<i>Surr: Phenol-d5</i>	S	39.1	0	32.7-80.9	%REC	1	05/02/09 01:03	
<i>Surr: Terphenyl-d14</i>	S	34.4	0	22.7-96.5	%REC	1	05/02/09 01:03	

PAHS BY GC/MS-SIM		Method: TO-13		Prep Date/Time: 04/29/09 10:30 Analyst: BEM				
Acenaphthene	A	ND	0.21	1.0	µg, Total	1	05/02/09 01:03	
Acenaphthylene	A	ND	0.22	1.0	µg, Total	1	05/02/09 01:03	
Anthracene	A	ND	0.27	1.0	µg, Total	1	05/02/09 01:03	
Benzo[a]anthracene	A	ND	0.47	1.0	µg, Total	1	05/02/09 01:03	
Benzo[a]pyrene	A	ND	0.38	1.0	µg, Total	1	05/02/09 01:03	
Benzo[b]fluoranthene	A	ND	0.44	1.0	µg, Total	1	05/02/09 01:03	
Benzo[g,h,i]perylene	A	ND	0.72	1.0	µg, Total	1	05/02/09 01:03	
Benzo[k]fluoranthene	A	ND	0.8	1.0	µg, Total	1	05/02/09 01:03	
Chrysene	A	ND	0.57	1.0	µg, Total	1	05/02/09 01:03	
Dibenz[a,h]anthracene	A	ND	0.54	1.0	µg, Total	1	05/02/09 01:03	
Fluoranthene	A	ND	0.39	1.0	µg, Total	1	05/02/09 01:03	
Fluorene	A	ND	0.25	1.0	µg, Total	1	05/02/09 01:03	
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0	µg, Total	1	05/02/09 01:03	
Naphthalene	A	ND	0.16	1.0	µg, Total	1	05/02/09 01:03	
Phenanthrene	A	ND	0.27	1.0	µg, Total	1	05/02/09 01:03	
Pyrene	A	ND	0.44	1.0	µg, Total	1	05/02/09 01:03	
<i>Surr: Nitrobenzene-d5</i>	S	32.5	0	33.7-77.1	S	%REC	1	05/02/09 01:03
<i>Surr: 2-Fluorobiphenyl</i>	S	30.6	0	32.7-83.2	S	%REC	1	05/02/09 01:03
<i>Surr: Terphenyl-d14</i>	S	34.4	0	22.7-96.5	%REC	1	05/02/09 01:03	

May 12, 2009 Off-Gas Sample Laboratory Results

ANALYTICAL RESULTS

Date:

Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-01A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	8100	190	620	ppbv	,20	05/19/09 09:18	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	05/19/09 01:06	
1,1,2-Trichloroethane	A	58	10	30	ppbv	60	05/19/09 01:06	
1,1-Dichloroethane	A	1500	42	150	ppbv	300	05/18/09 15:31	
1,1-Dichloroethene	A	35	10	30	ppbv	60	05/19/09 01:06	
1,2-Dichloroethane	A	210	10	30	ppbv	60	05/19/09 01:06	
1,2-Dichloropropane	A	65	8.4	30	ppbv	60	05/19/09 01:06	
2-Butanone	A	2800	36	590	ppbv	300	05/18/09 15:31	
2-Hexanone	A	ND	20	120	ppbv	60	05/19/09 01:06	
4-Methyl-2-Pentanone	A	1700	71	150	ppbv	300	05/18/09 15:31	
Acetone	A	2200	170	590	ppbv	300	05/18/09 15:31	
Benzene	A	3400	36	150	ppbv	300	05/18/09 15:31	
Bromodichloromethane	A	ND	9	30	ppbv	60	05/19/09 01:06	
Bromoform	A	ND	10	30	ppbv	60	05/19/09 01:06	
Bromomethane	A	ND	11	30	ppbv	60	05/19/09 01:06	
Carbon disulfide	A	ND	11	30	ppbv	60	05/19/09 01:06	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	05/19/09 01:06	
Chlorobenzene	A	ND	9.6	30	ppbv	60	05/19/09 01:06	
Chloroethane	A	78	10	30	ppbv	60	05/19/09 01:06	
Chloroform	A	1100	7.2	30	ppbv	60	05/19/09 01:06	
Chloromethane	A	ND	14	120	ppbv	60	05/19/09 01:06	
cis-1,2-Dichloroethene	A	1100	8.4	30	ppbv	60	05/19/09 01:06	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	05/19/09 01:06	
Dibromochloromethane	A	ND	10	30	ppbv	60	05/19/09 01:06	
Ethyl benzene	A	3000	53	150	ppbv	300	05/18/09 15:31	
m,p-Xylene	A	12000	380	1200	ppbv	,20	05/19/09 09:18	
Methylene chloride	A	6800	180	5000	ppbv	,20	05/19/09 09:18	
o-Xylene	A	5200	50	150	ppbv	300	05/18/09 15:31	
Styrene	A	150	11	30	ppbv	60	05/19/09 01:06	
Tetrachloroethene	A	5400	50	150	ppbv	300	05/18/09 15:31	
Toluene	A	20000	220	620	ppbv	,20	05/19/09 09:18	
trans-1,2-Dichloroethene	A	ND	19	30	ppbv	60	05/19/09 01:06	
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	05/19/09 01:06	
Trichloroethene	A	4800	48	150	ppbv	300	05/18/09 15:31	
Vinyl chloride	A	86	9	30	ppbv	60	05/19/09 01:06	
Surr: 4-Bromofluorobenzene	S	106	0	77.7-127	%REC	60	05/19/09 01:06	

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-02A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	8800	410	1400	ppbv	1,000	05/18/09 20:50	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	05/19/09 01:47	
1,1,2-Trichloroethane	A	ND	10	30	ppbv	60	05/19/09 01:47	
1,1-Dichloroethane	A	800	8.4	30	ppbv	60	05/19/09 01:47	
1,1-Dichloroethene	A	23	10	30	J	ppbv	60	05/19/09 01:47
1,2-Dichloroethane	A	85	10	30	ppbv	60	05/19/09 01:47	
1,2-Dichloropropane	A	ND	8.4	30	ppbv	60	05/19/09 01:47	
2-Butanone	A	98	7.2	120	J	ppbv	60	05/19/09 01:47
2-Hexanone	A	ND	20	120	ppbv	60	05/19/09 01:47	
4-Methyl-2-Pentanone	A	340	14	30	ppbv	60	05/19/09 01:47	
Acetone	A	200	34	120	U	ppbv	60	05/19/09 01:47
Benzene	A	530	7.2	30	ppbv	60	05/19/09 01:47	
Bromodichloromethane	A	ND	9	30	ppbv	60	05/19/09 01:47	
Bromoform	A	ND	10	30	ppbv	60	05/19/09 01:47	
Bromomethane	A	ND	11	30	ppbv	60	05/19/09 01:47	
Carbon disulfide	A	ND	11	30	ppbv	60	05/19/09 01:47	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	05/19/09 01:47	
Chlorobenzene	A	ND	9.6	30	ppbv	60	05/19/09 01:47	
Chloroethane	A	28	10	30	J	ppbv	60	05/19/09 01:47
Chloroform	A	1100	7.2	30	ppbv	60	05/19/09 01:47	
Chloromethane	A	ND	14	120	ppbv	60	05/19/09 01:47	
cis-1,2-Dichloroethene	A	2800	42	150	ppbv	300	05/18/09 16:52	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	05/19/09 01:47	
Dibromochloromethane	A	ND	10	30	ppbv	60	05/19/09 01:47	
Ethyl benzene	A	1200	11	30	ppbv	60	05/19/09 01:47	
m,p-Xylene	A	5900	89	300	ppbv	300	05/18/09 16:52	
Methylene chloride	A	2200	42	1200	ppbv	300	05/18/09 16:52	
o-Xylene	A	2700	50	150	ppbv	300	05/18/09 16:52	
Styrene	A	25	11	30	J	ppbv	60	05/19/09 01:47
Tetrachloroethene	A	5100	50	150	ppbv	300	05/18/09 16:52	
Toluene	A	5500	53	150	ppbv	300	05/18/09 16:52	
trans-1,2-Dichloroethene	A	23	19	30	J	ppbv	60	05/19/09 01:47
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	05/19/09 01:47	
Trichloroethene	A	3400	48	150	ppbv	300	05/18/09 16:52	
Vinyl chloride	A	95	9	30	ppbv	60	05/19/09 01:47	
<i>Surr: 4-Bromofluorobenzene</i>	S	97.5	0	77.7-127	%REC	60	05/19/09 01:47	

1/10/09

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-03A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method: TO-15		Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	9700	410	1400	ppbv	3,00	05/18/09	21:29
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	05/19/09	02:32
1,1,2-Trichloroethane	A	ND	10	30	ppbv	60	05/19/09	02:32
1,1-Dichloroethane	A	810	8.4	30	ppbv	60	05/19/09	02:32
1,1-Dichloroethene	A	25	10	30	J	ppbv	60	05/19/09 02:32
1,2-Dichloroethane	A	84	10	30	ppbv	60	05/19/09 02:32	
1,2-Dichloropropane	A	.56	8.4	30	ppbv	60	05/19/09 02:32	
2-Butanone	A	99	7.2	120	J	ppbv	60	05/19/09 02:32
2-Hexanone	A	ND	20	120	ppbv	60	05/19/09 02:32	
4-Methyl-2-Pentanone	A	400	14	30	ppbv	60	05/19/09 02:32	
Acetone	A	210	34	120	U	ppbv	60	05/19/09 02:32
Benzene	A	520	7.2	30	ppbv	60	05/19/09 02:32	
Bromodichloromethane	A	ND	9	30	ppbv	60	05/19/09 02:32	
Bromoform	A	ND	10	30	ppbv	60	05/19/09 02:32	
Bromomethane	A	ND	11	30	ppbv	60	05/19/09 02:32	
Carbon disulfide	A	ND	11	30	ppbv	60	05/19/09 02:32	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	05/19/09 02:32	
Chlorobenzene	A	ND	9.6	30	ppbv	60	05/19/09 02:32	
Chloroethane	A	31	10	30	ppbv	60	05/19/09 02:32	
Chloroform	A	1100	7.2	30	ppbv	60	05/19/09 02:32	
Chloromethane	A	ND	14	120	ppbv	60	05/19/09 02:32	
cis-1,2-Dichloroethene	A	3000	42	150	ppbv	300	05/18/09	17:31
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	05/19/09 02:32	
Dibromochloromethane	A	ND	10	30	ppbv	60	05/19/09 02:32	
Ethyl benzene	A	1400	54	150	ppbv	300	05/18/09 17:31	
m,p-Xylene	A	5500	90	300	ppbv	300	05/18/09 17:31	
Methylene chloride	A	1900	42	1200	ppbv	300	05/18/09 17:31	
o-Xylene	A	2600	51	150	ppbv	300	05/18/09 17:31	
Styrene	A	26	11	30	J	ppbv	60	05/19/09 02:32
Tetrachloroethene	A	5100	51	150	ppbv	300	05/18/09 17:31	
Toluene	A	4500	54	150	ppbv	300	05/18/09 17:31	
trans-1,2-Dichloroethene	A	22	19	30	J	ppbv	60	05/19/09 02:32
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	05/19/09 02:32	
Trichloroethene	A	3300	48	150	ppbv	300	05/18/09 17:31	
Vinyl chloride	A	110	9	30	ppbv	60	05/19/09 02:32	
Surr: 4-Bromofluorobenzene	S	98.7	0	77.7-127	%REC	60	05/19/09 02:32	

M10log

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-04A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	4900	45	150		ppbv	300	05/18/09 18:11
1,1,2,2-Tetrachloroethane	A	ND	13	30		ppbv	60	05/19/09 03:17
1,1,2-Trichloroethane	A	ND	10	30		ppbv	60	05/19/09 03:17
1,1-Dichloroethane	A	650	8.4	30		ppbv	60	05/19/09 03:17
1,1-Dichloroethene	A	20	10	30	J	ppbv	60	05/19/09 03:17
1,2-Dichloroethane	A	67	10	30		ppbv	60	05/19/09 03:17
1,2-Dichloropropane	A	48	8.4	30		ppbv	60	05/19/09 03:17
2-Butanone	A	95	7.2	120	J	ppbv	60	05/19/09 03:17
2-Hexanone	A	ND	20	120		ppbv	60	05/19/09 03:17
4-Methyl-2-Pentanone	A	310	14	30		ppbv	60	05/19/09 03:17
Acetone	A	220	34	120	U	ppbv	60	05/19/09 03:17
Benzene	A	320	7.2	30		ppbv	60	05/19/09 03:17
Bromodichloromethane	A	ND	9	30		ppbv	60	05/19/09 03:17
Bromoform	A	ND	10	30		ppbv	60	05/19/09 03:17
Bromomethane	A	ND	11	30		ppbv	60	05/19/09 03:17
Carbon disulfide	A	ND	11	30		ppbv	60	05/19/09 03:17
Carbon tetrachloride	A	ND	9.6	30		ppbv	60	05/19/09 03:17
Chlorobenzene	A	51	9.6	30		ppbv	60	05/19/09 03:17
Chloroethane	A	44	10	30		ppbv	60	05/19/09 03:17
Chloroform	A	800	7.2	30		ppbv	60	05/19/09 03:17
Chloromethane	A	ND	14	120		ppbv	60	05/19/09 03:17
cis-1,2-Dichloroethene	A	2700	42	150		ppbv	300	05/18/09 18:11
cis-1,3-Dichloropropene	A	ND	8.4	30		ppbv	60	05/19/09 03:17
Dibromochloromethane	A	ND	10	30		ppbv	60	05/19/09 03:17
Ethyl benzene	A	1200	11	30		ppbv	60	05/19/09 03:17
m,p-Xylene	A	5500	90	300		ppbv	300	05/18/09 18:11
Methylene chloride	A	1500	42	1200		ppbv	300	05/18/09 18:11
o-Xylene	A	2600	51	150		ppbv	300	05/18/09 18:11
Styrene	A	23	11	30	J	ppbv	60	05/19/09 03:17
Tetrachloroethene	A	4700	51	150		ppbv	300	05/18/09 18:11
Toluene	A	4300	54	150		ppbv	300	05/18/09 18:11
trans-1,2-Dichloroethene	A	20	19	30	J	ppbv	60	05/19/09 03:17
trans-1,3-Dichloropropene	A	ND	7.2	30		ppbv	60	05/19/09 03:17
Trichloroethene	A	3000	48	150		ppbv	300	05/18/09 18:11
Vinyl chloride	A	120	9	30		ppbv	60	05/19/09 03:17
Surr: 4-Bromofluorobenzene	S	96.7	0	77.7-127		%REC	60	05/19/09 03:17

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-05A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	33	0.74	2.4	ppbv	5	05/18/09 18:52	
1,1,2,2-Tetrachloroethane	A	ND	0.22	0.50	ppbv	1	05/18/09 22:52	
1,1,2-Trichloroethane	A	0.36	0.17	0.50	J	ppbv	1	05/18/09 22:52
1,1-Dichloroethane	A	8.6	0.14	0.50	ppbv	1	05/18/09 22:52	
1,1-Dichloroethene	A	8.8	0.17	0.50	ppbv	1	05/18/09 22:52	
1,2-Dichloroethane	A	1.3	0.17	0.50	ppbv	1	05/18/09 22:52	
1,2-Dichloropropane	A	ND	0.14	0.50	ppbv	1	05/18/09 22:52	
2-Butanone	A	11	0.12	2.0	ppbv	1	05/18/09 22:52	
2-Hexanone	A	0.61	0.34	2.0	J	ppbv	1	05/18/09 22:52
4-Methyl-2-Pentanone	A	8.9	0.24	0.50	ppbv	1	05/18/09 22:52	
Acetone	A	16	0.56	2.0	b	ppbv	1	05/18/09 22:52
Benzene	A	17	0.59	2.4	ppbv	5	05/18/09 18:52	
Bromodichloromethane	A	ND	0.15	0.50	ppbv	1	05/18/09 22:52	
Bromoform	A	ND	0.17	0.50	ppbv	1	05/18/09 22:52	
Bromomethane	A	ND	0.19	0.50	ppbv	1	05/18/09 22:52	
Carbon disulfide	A	ND	0.18	0.50	ppbv	1	05/18/09 22:52	
Carbon tetrachloride	A	ND	0.16	0.50	ppbv	1	05/18/09 22:52	
Chlorobenzene	A	ND	0.16	0.50	ppbv	1	05/18/09 22:52	
Chloroethane	A	0.90	0.17	0.50	ppbv	1	05/18/09 22:52	
Chloroform	A	8.4	0.12	0.50	ppbv	1	05/18/09 22:52	
Chloromethane	A	0.84	0.23	2.0	J	ppbv	1	05/18/09 22:52
cis-1,2-Dichloroethene	A	14	0.14	0.50	ppbv	1	05/18/09 22:52	
cis-1,3-Dichloropropene	A	ND	0.14	0.50	ppbv	1	05/18/09 22:52	
Dibromochloromethane	A	ND	0.17	0.50	ppbv	1	05/18/09 22:52	
Ethyl benzene	A	14	0.18	0.50	ppbv	1	05/18/09 22:52	
m,p-Xylene	A	46	1.5	4.9	ppbv	5	05/18/09 18:52	
Methylene chloride	A	23	0.69	20	ppbv	5	05/18/09 18:52	
o-Xylene	A	19	0.83	2.4	ppbv	5	05/18/09 18:52	
Styrene	A	3.7	0.19	0.50	ppbv	1	05/18/09 22:52	
Tetrachloroethene	A	35	0.83	2.4	ppbv	5	05/18/09 18:52	
Toluene	A	80	0.88	2.4	ppbv	5	05/18/09 18:52	
trans-1,2-Dichloroethene	A	1.9	0.31	0.50	ppbv	1	05/18/09 22:52	
trans-1,3-Dichloropropene	A	ND	0.12	0.50	ppbv	1	05/18/09 22:52	
Trichloroethene	A	25	0.78	2.4	ppbv	5	05/18/09 18:52	
Vinyl chloride	A	3.7	0.15	0.50	ppbv	1	05/18/09 22:52	
Surr: 4-Bromofluorobenzene	S	99.6	0	77.7-127	%REC	1	05/18/09 22:52	

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-06A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method:	TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	8800	180	600	ppbv	,20	05/19/09 21:32	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	05/19/09 18:49	
1,1,2-Trichloroethane	A	56	10	30	ppbv	60	05/19/09 18:49	
1,1-Dichloroethane	A	1500	42	150	ppbv	300	05/19/09 16:10	
1,1-Dichloroethene	A	34	10	30	ppbv	60	05/19/09 18:49	
1,2-Dichloroethane	A	210	10	30	ppbv	60	05/19/09 18:49	
1,2-Dichloropropane	A	59	8.4	30	ppbv	60	05/19/09 18:49	
2-Butanone	A	2500	36	600	ppbv	300	05/19/09 16:10	
2-Hexanone	A	ND	20	120	ppbv	60	05/19/09 18:49	
4-Methyl-2-Pentanone	A	1500	72	150	ppbv	300	05/19/09 16:10	
Acetone	A	1700	170	600	ppbv	300	05/19/09 16:10	
Benzene	A	3300	36	150	ppbv	300	05/19/09 16:10	
Bromodichloromethane	A	ND	9	30	ppbv	60	05/19/09 18:49	
Bromoform	A	ND	10	30	ppbv	60	05/19/09 18:49	
Bromomethane	A	ND	11	30	ppbv	60	05/19/09 18:49	
Carbon disulfide	A	ND	11	30	ppbv	60	05/19/09 18:49	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	05/19/09 18:49	
Chlorobenzene	A	ND	9.6	30	ppbv	60	05/19/09 18:49	
Chloroethane	A	180	10	30	ppbv	60	05/19/09 18:49	
Chloroform	A	1000	7.2	30	ppbv	60	05/19/09 18:49	
Chloromethane	A	ND	14	120	ppbv	60	05/19/09 18:49	
cis-1,2-Dichloroethene	A	930	8.4	30	ppbv	60	05/19/09 18:49	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	05/19/09 18:49	
Dibromochloromethane	A	ND	10	30	ppbv	60	05/19/09 18:49	
Ethyl benzene	A	2700	54	150	ppbv	300	05/19/09 16:10	
m,p-Xylene	A	11000	90	300	ppbv	300	05/19/09 16:10	
Methylene chloride	A	7900	170	4800	ppbv	,20	05/19/09 21:32	
o-Xylene	A	4500	51	150	ppbv	300	05/19/09 16:10	
Styrene	A	120	11	30	ppbv	60	05/19/09 18:49	
Tetrachloroethene	A	4700	51	150	ppbv	300	05/19/09 16:10	
Toluene	A	30000	490	1400	ppbv	,00	05/19/09 18:08	
trans-1,2-Dichloroethene	A	19	19	30	J	ppbv	60	05/19/09 18:49
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	05/19/09 18:49	
Trichloroethene	A	4400	48	150	ppbv	300	05/19/09 16:10	
Vinyl chloride	A	140	9	30	ppbv	60	05/19/09 18:49	
Surr: 4-Bromofluorobenzene	S	100	0	77.7-127	%REC	60	05/19/09 18:49	

F1/10/09

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-07A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method:	TO-15	Prep Date/Time:			Analyst:	MAK	
1,1,1-Trichloroethane	A	8500	170	580	ppbv	,20	05/19/09 22:15	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	05/19/09 19:30	
1,1,2-Trichloroethane	A	55	10	30	ppbv	60	05/19/09 19:30	
1,1-Dichloroethane	A	1500	42	150	ppbv	300	05/19/09 16:49	
1,1-Dichloroethene	A	32	10	30	ppbv	60	05/19/09 19:30	
1,2-Dichloroethane	A	210	10	30	ppbv	60	05/19/09 19:30	
1,2-Dichloropropane	A	61	8.4	30	ppbv	60	05/19/09 19:30	
2-Butanone	A	2500	36	590	ppbv	300	05/19/09 16:49	
2-Hexanone	A	ND	20	120	ppbv	60	05/19/09 19:30	
4-Methyl-2-Pentanone	A	1400	71	150	ppbv	300	05/19/09 16:49	
Acetone	A	1900	170	590	ppbv	300	05/19/09 16:49	
Benzene	A	3300	36	150	ppbv	300	05/19/09 16:49	
Bromodichloromethane	A	ND	9	30	ppbv	60	05/19/09 19:30	
Bromoform	A	ND	10	30	ppbv	60	05/19/09 19:30	
Bromomethane	A	ND	11	30	ppbv	60	05/19/09 19:30	
Carbon disulfide	A	ND	11	30	ppbv	60	05/19/09 19:30	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	05/19/09 19:30	
Chlorobenzene	A	ND	9.6	30	ppbv	60	05/19/09 19:30	
Chloroethane	A	160	10	30	ppbv	60	05/19/09 19:30	
Chloroform	A	1000	7.2	30	ppbv	60	05/19/09 19:30	
Chloromethane	A	ND	14	120	ppbv	60	05/19/09 19:30	
cis-1,2-Dichloroethene	A	960	8.4	30	ppbv	60	05/19/09 19:30	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	05/19/09 19:30	
Dibromochloromethane	A	ND	10	30	ppbv	60	05/19/09 19:30	
Ethyl benzene	A	2700	53	150	ppbv	300	05/19/09 16:49	
m,p-Xylene	A	11000	89	300	ppbv	300	05/19/09 16:49	
Methylene chloride	A	7600	160	4600	ppbv	,20	05/19/09 22:15	
o-Xylene	A	4600	50	150	ppbv	300	05/19/09 16:49	
Styrene	A	130	11	30	ppbv	60	05/19/09 19:30	
Tetrachloroethene	A	4800	50	150	ppbv	300	05/19/09 16:49	
Toluene	A	33000	540	1500	ppbv	,00	05/19/09 17:28	
trans-1,2-Dichloroethene	A	20	19	30	J	ppbv	60	05/19/09 19:30
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	05/19/09 19:30	
Trichloroethene	A	4400	48	150	ppbv	300	05/19/09 16:49	
Vinyl chloride	A	130	9	30	ppbv	60	05/19/09 19:30	
Surr: 4-Bromofluorobenzene	S	103	0	77.7-127	%REC	60	05/19/09 19:30	

6/10/09

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-08A
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	180	3	10		ppbv	20	05/19/09 15:30
1,1,2,2-Tetrachloroethane	A	ND	0.22	0.50		ppbv	1	05/19/09 00:22
1,1,2-Trichloroethane	A	1.6	0.17	0.50		ppbv	1	05/19/09 00:22
1,1-Dichloroethane	A	37	0.7	2.5		ppbv	5	05/18/09 19:31
1,1-Dichloroethene	A	41	0.85	2.5		ppbv	5	05/18/09 19:31
1,2-Dichloroethane	A	5.3	0.17	0.50		ppbv	1	05/19/09 00:22
1,2-Dichloropropane	A	1.4	0.14	0.50		ppbv	1	05/19/09 00:22
2-Butanone	A	35	0.6	10		ppbv	5	05/18/09 19:31
2-Hexanone	A	0.66	0.34	2.0	J	ppbv	1	05/19/09 00:22
4-Methyl-2-Pentanone	A	17	0.24	0.50		ppbv	1	05/19/09 00:22
Acetone	A	43	2.8	10		ppbv	5	05/18/09 19:31
Benzene	A	100	2.4	10		ppbv	20	05/19/09 15:30
Bromodichloromethane	A	ND	0.15	0.50		ppbv	1	05/19/09 00:22
Bromoform	A	ND	0.17	0.50		ppbv	1	05/19/09 00:22
Bromomethane	A	ND	0.19	0.50		ppbv	1	05/19/09 00:22
Carbon disulfide	A	ND	0.18	0.50		ppbv	1	05/19/09 00:22
Carbon tetrachloride	A	0.25	0.16	0.50	J	ppbv	1	05/19/09 00:22
Chlorobenzene	A	3.1	0.16	0.50		ppbv	1	05/19/09 00:22
Chloroethane	A	ND	0.17	0.50		ppbv	1	05/19/09 00:22
Chloroform	A	32	0.6	2.5		ppbv	5	05/18/09 19:31
Chloromethane	A	1.9	0.23	2.0	J	ppbv	1	05/19/09 00:22
cis-1,2-Dichloroethene	A	30	0.7	2.5		ppbv	5	05/18/09 19:31
cis-1,3-Dichloropropene	A	ND	0.14	0.50		ppbv	1	05/19/09 00:22
Dibromochloromethane	A	ND	0.17	0.50		ppbv	1	05/19/09 00:22
Ethyl benzene	A	50	0.9	2.5		ppbv	5	05/18/09 19:31
m,p-Xylene	A	190	1.5	5.0		ppbv	5	05/18/09 19:31
Methylene chloride	A	160	2.8	80		ppbv	20	05/19/09 15:30
o-Xylene	A	79	0.85	2.5		ppbv	5	05/18/09 19:31
Styrene	A	16	0.19	0.50		ppbv	1	05/19/09 00:22
Tetrachloroethene	A	140	3.4	10		ppbv	20	05/19/09 15:30
Toluene	A	370	3.6	10		ppbv	20	05/19/09 15:30
trans-1,2-Dichloroethene	A	3.0	0.31	0.50		ppbv	1	05/19/09 00:22
trans-1,3-Dichloropropene	A	ND	0.12	0.50		ppbv	1	05/19/09 00:22
Trichloroethene	A	110	3.2	10		ppbv	20	05/19/09 15:30
Vinyl chloride	A	11	0.15	0.50		ppbv	1	05/19/09 00:22
Surr: 4-Bromofluorobenzene	S	99.1	0	77.7-127		%REC	1	05/19/09 00:22

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-01B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD		Prep Date/Time: 05/18/09 13:17 Analyst: BEM				
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
1,2-Dichlorobenzene	A	0.96	0.7	10	J	µg, Total	1	05/19/09 23:30
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/19/09 23:30
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/19/09 23:30
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/19/09 23:30
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/19/09 23:30
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	05/19/09 23:30
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	05/19/09 23:30
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	05/19/09 23:30
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/19/09 23:30
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/19/09 23:30
2-Nitroaniline	A	ND	1	50		µg, Total	1	05/19/09 23:30
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/19/09 23:30
3,3'-Dichlorobenzidine	A	ND	0.7	50		µg, Total	1	05/19/09 23:30
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	05/19/09 23:30
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/19/09 23:30
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	05/19/09 23:30
4-Bromophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/19/09 23:30
4-Chloroaniline	A	ND	1	10		µg, Total	1	05/19/09 23:30
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	05/19/09 23:30
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/19/09 23:30
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	05/19/09 23:30
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
Bis(2-ethylhexyl)phthalate	A	1.9	1.1	10	J	µg, Total	1	05/19/09 23:30
Butyl benzyl phthalate	A	ND	1	10		µg, Total	1	05/19/09 23:30
Carbazole	A	ND	1.2	10		µg, Total	1	05/19/09 23:30
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/19/09 23:30
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/19/09 23:30
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/19/09 23:30
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/19/09 23:30
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	05/19/09 23:30

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ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-01B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/19/09 23:30
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/19/09 23:30
Isophorone	A	1.1	1	10	J	µg, Total	1	05/19/09 23:30
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/19/09 23:30
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/19/09 23:30
Nitrobenzene	A	ND	1	10		µg, Total	1	05/19/09 23:30
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/19/09 23:30
Phenol	A	ND	0.4	10		µg, Total	1	05/19/09 23:30
Surr: 2,4,6-Tribromophenol	S	42.9	0	40.5-97		%REC	1	05/19/09 23:30
Surr: 2-Fluorobiphenyl	S	33.6	0	32.7-83.2		%REC	1	05/19/09 23:30
Surr: 2-Fluorophenol	S	34.6	0	20.5-87.9		%REC	1	05/19/09 23:30
Surr: Nitrobenzene-d5	S	35.0	0	33.7-77.1		%REC	1	05/19/09 23:30
Surr: Phenol-d5	S	37.9	0	32.7-80.9		%REC	1	05/19/09 23:30
Surr: Terphenyl-d14	S	25.6	0	22.7-96.5		%REC	1	05/19/09 23:30

PAHS BY GC/MS-SIM		Method: TO-13						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/19/09 23:30
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/19/09 23:30
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/19/09 23:30
Benzo[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/19/09 23:30
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/19/09 23:30
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/19/09 23:30
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/19/09 23:30
Benzo[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/19/09 23:30
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/19/09 23:30
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/19/09 23:30
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/19/09 23:30
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/19/09 23:30
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/19/09 23:30
Naphthalene	A	2.2	0.16	1.0		µg, Total	1	05/19/09 23:30
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/19/09 23:30
Pyrene	A	0.93	0.44	1.0	J	µg, Total	1	05/19/09 23:30
Surr: Nitrobenzene-d5	S	35.0	0	33.7-77.1		%REC	1	05/19/09 23:30
Surr: 2-Fluorobiphenyl	S	33.6	0	32.7-83.2		%REC	1	05/19/09 23:30
Surr: Terphenyl-d14	S	25.6	0	22.7-96.5		%REC	1	05/19/09 23:30

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-02B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD		Prep Date/Time: 05/18/09 13:17				Analyst: BEM
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
1,2-Dichlorobenzene	A	1.2	0.7	10	J	µg, Total	1	05/19/09 23:49
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/19/09 23:49
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/19/09 23:49
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/19/09 23:49
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/19/09 23:49
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	05/19/09 23:49
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	05/19/09 23:49
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	05/19/09 23:49
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/19/09 23:49
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/19/09 23:49
2-Nitroaniline	A	ND	1	50		µg, Total	1	05/19/09 23:49
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/19/09 23:49
3,3'-Dichlorobenzidine	A	ND	0.7	50		µg, Total	1	05/19/09 23:49
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	05/19/09 23:49
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/19/09 23:49
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	05/19/09 23:49
4-Bromophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/19/09 23:49
4-Chloroaniline	A	ND	1	10		µg, Total	1	05/19/09 23:49
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	05/19/09 23:49
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/19/09 23:49
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	05/19/09 23:49
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
Bis(2-ethylhexyl)phthalate	A	1.1	1.1	10	J	µg, Total	1	05/19/09 23:49
Butyl benzyl phthalate	A	ND	1	10		µg, Total	1	05/19/09 23:49
Carbazole	A	ND	1.2	10		µg, Total	1	05/19/09 23:49
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/19/09 23:49
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/19/09 23:49
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/19/09 23:49
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/19/09 23:49
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	05/19/09 23:49

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-02B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE Method: TO-13MOD		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/19/09 23:49
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/19/09 23:49
Isophorone	A	ND	1	10		µg, Total	1	05/19/09 23:49
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/19/09 23:49
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/19/09 23:49
Nitrobenzene	A	ND	1	10		µg, Total	1	05/19/09 23:49
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/19/09 23:49
Phenol	A	ND	0.4	10		µg, Total	1	05/19/09 23:49
Surr: 2,4,6-Tribromophenol	S	37.9	0	40.5-97	S	%REC	1	05/19/09 23:49
Surr: 2-Fluorobiphenyl	S	32.9	0	32.7-83.2		%REC	1	05/19/09 23:49
Surr: 2-Fluorophenol	S	33.8	0	20.5-87.9		%REC	1	05/19/09 23:49
Surr: Nitrobenzene-d5	S	34.8	0	33.7-77.1		%REC	1	05/19/09 23:49
Surr: Phenol-d5	S	37.1	0	32.7-80.9		%REC	1	05/19/09 23:49
Surr: Terphenyl-d14	S	23.8	0	22.7-96.5		%REC	1	05/19/09 23:49

PAHS BY GC/MS-SIM Method: TO-13		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/19/09 23:49
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/19/09 23:49
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/19/09 23:49
Benz[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/19/09 23:49
Benz[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/19/09 23:49
Benz[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/19/09 23:49
Benz[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/19/09 23:49
Benz[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/19/09 23:49
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/19/09 23:49
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/19/09 23:49
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/19/09 23:49
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/19/09 23:49
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/19/09 23:49
Naphthalene	A	ND	0.16	1.0		µg, Total	1	05/19/09 23:49
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/19/09 23:49
Pyrene	A	ND	0.44	1.0		µg, Total	1	05/19/09 23:49
Surr: Nitrobenzene-d5	S	34.8	0	33.7-77.1		%REC	1	05/19/09 23:49
Surr: 2-Fluorobiphenyl	S	32.9	0	32.7-83.2		%REC	1	05/19/09 23:49
Surr: Terphenyl-d14	S	23.8	0	22.7-96.5		%REC	1	05/19/09 23:49

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-03B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method:	TO-13MOD	Prep Date/Time: 05/18/09 13:17 Analyst: BEM				
1,2,4-Trichlorobenzene	A	ND	0.9	10	UJ	µg, Total	1	05/20/09 00:07
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	05/20/09 00:07
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/20/09 00:07
1,4-Dichlorobenzene	A	ND	0.9	10	↓	µg, Total	1	05/20/09 00:07
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/20/09 00:07
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/20/09 00:07
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 00:07
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 00:07
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	05/20/09 00:07
2,4-Dinitrotoluene	A	ND	0.8	10	UJ	µg, Total	1	05/20/09 00:07
2,6-Dinitrotoluene	A	ND	1.1	10	↓	µg, Total	1	05/20/09 00:07
2-Chloronaphthalene	A	ND	0.9	10	↓	µg, Total	1	05/20/09 00:07
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 00:07
2-Methylnaphthalene	A	ND	0.9	10	UJ	µg, Total	1	05/20/09 00:07
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/20/09 00:07
2-Nitroaniline	A	ND	1	50	UJ	µg, Total	1	05/20/09 00:07
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/20/09 00:07
3,3'-Dichlorobenzidine	A	ND	0.7	50	UJ	µg, Total	1	05/20/09 00:07
3-Nitroaniline	A	ND	1.3	50	↓	µg, Total	1	05/20/09 00:07
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 00:07
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	05/20/09 00:07
4-Bromophenyl phenyl ether	A	ND	0.9	10	UJ	µg, Total	1	05/20/09 00:07
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/20/09 00:07
4-Chloroaniline	A	ND	1	10	UJ	µg, Total	1	05/20/09 00:07
4-Chlorophenyl phenyl ether	A	ND	0.9	10	↓	µg, Total	1	05/20/09 00:07
4-Nitroaniline	A	ND	1.7	50	↓	µg, Total	1	05/20/09 00:07
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/20/09 00:07
Bis(2-chloroethoxy)methane	A	ND	1	10	UJ	µg, Total	1	05/20/09 00:07
Bis(2-chloroethyl)ether	A	ND	0.9	10	UJ	µg, Total	1	05/20/09 00:07
Bis(2-chloroisopropyl)ether	A	ND	0.9	10	↓	µg, Total	1	05/20/09 00:07
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	↓	µg, Total	1	05/20/09 00:07
Butyl benzyl phthalate	A	ND	1	10	UJ	µg, Total	1	05/20/09 00:07
Carbazole	A	ND	1.2	10		µg, Total	1	05/20/09 00:07
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/20/09 00:07
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 00:07
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/20/09 00:07
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 00:07
Dimethyl phthalate	A	ND	0.9	10	↓	µg, Total	1	05/20/09 00:07
Hexachlorobenzene	A	ND	0.9	10	↓	µg, Total	1	05/20/09 00:07

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7/10/09

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-03B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
						Prep Date/Time: 05/18/09 13:17	Analyst: BEM	
Hexachlorobutadiene	A	ND	0.9	10	μJ	ug, Total	1	05/20/09 00:07
Hexachlorocyclopentadiene	A	ND	0.6	10		ug, Total	1	05/20/09 00:07
Hexachloroethane	A	ND	0.9	10		ug, Total	1	05/20/09 00:07
Isophorone	A	ND	1	10		ug, Total	1	05/20/09 00:07
N-Nitrosodi-n-propylamine	A	ND	1	10		ug, Total	1	05/20/09 00:07
N-Nitrosodiphenylamine	A	ND	0.7	10		ug, Total	1	05/20/09 00:07
Nitrobenzene	A	ND	1	10		ug, Total	1	05/20/09 00:07
Pentachlorophenol	A	ND	1.3	50		ug, Total	1	05/20/09 00:07
Phenol	A	ND	0.4	10		ug, Total	1	05/20/09 00:07
Surr: 2,4,6-Tribromophenol	S	33.9	0	40.5-97	S	%REC	1	05/20/09 00:07
Surr: 2-Fluorobiphenyl	S	28.2	0	32.7-83.2	S	%REC	1	05/20/09 00:07
Surr: 2-Fluorophenol	S	30.5	0	20.5-87.9		%REC	1	05/20/09 00:07
Surr: Nitrobenzene-d5	S	30.1	0	33.7-77.1	S	%REC	1	05/20/09 00:07
Surr: Phenol-d5	S	32.9	0	32.7-80.9		%REC	1	05/20/09 00:07
Surr: Terphenyl-d14	S	22.6	0	22.7-96.5	S	%REC	1	05/20/09 00:07

PAHS BY GC/MS-SIM		Method: TO-13						
						Prep Date/Time: 05/18/09 13:17	Analyst: BEM	
Acenaphthene	A	ND	0.21	1.0	μJ	ug, Total	1	05/20/09 00:07
Acenaphthylene	A	ND	0.22	1.0		ug, Total	1	05/20/09 00:07
Anthracene	A	ND	0.27	1.0		ug, Total	1	05/20/09 00:07
Benz[a]anthracene	A	ND	0.47	1.0		ug, Total	1	05/20/09 00:07
Benz[a]pyrene	A	ND	0.38	1.0		ug, Total	1	05/20/09 00:07
Benz[b]fluoranthene	A	ND	0.44	1.0		ug, Total	1	05/20/09 00:07
Benz[g,h,i]perylene	A	ND	0.72	1.0		ug, Total	1	05/20/09 00:07
Benzo[k]fluoranthene	A	ND	0.8	1.0		ug, Total	1	05/20/09 00:07
Chrysene	A	ND	0.57	1.0		ug, Total	1	05/20/09 00:07
Dibenz[a,h]anthracene	A	ND	0.54	1.0		ug, Total	1	05/20/09 00:07
Fluoranthene	A	ND	0.39	1.0		ug, Total	1	05/20/09 00:07
Fluorene	A	ND	0.25	1.0		ug, Total	1	05/20/09 00:07
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		ug, Total	1	05/20/09 00:07
Naphthalene	A	ND	0.16	1.0		ug, Total	1	05/20/09 00:07
Phenanthrene	A	ND	0.27	1.0		ug, Total	1	05/20/09 00:07
Pyrene	A	ND	0.44	1.0		ug, Total	1	05/20/09 00:07
Surr: Nitrobenzene-d5	S	30.1	0	33.7-77.1	S	%REC	1	05/20/09 00:07
Surr: 2-Fluorobiphenyl	S	28.2	0	32.7-83.2	S	%REC	1	05/20/09 00:07
Surr: Terphenyl-d14	S	22.6	0	22.7-96.5	S	%REC	1	05/20/09 00:07

M. Moog

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air **Work Order / ID:** ME0905501-04B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method:	Prep Date/Time: 05/18/09 13:17 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	05/20/09 00:25
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/20/09 00:25
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/20/09 00:25
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 00:25
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 00:25
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	05/20/09 00:25
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	05/20/09 00:25
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	05/20/09 00:25
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 00:25
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/20/09 00:25
2-Nitroaniline	A	ND	1	50		µg, Total	1	05/20/09 00:25
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/20/09 00:25
3,3'-Dichlorobenzidine	A	ND	0.7	50		µg, Total	1	05/20/09 00:25
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	05/20/09 00:25
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 00:25
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	05/20/09 00:25
4-Bromophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/20/09 00:25
4-Chloroaniline	A	ND	1	10		µg, Total	1	05/20/09 00:25
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	05/20/09 00:25
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/20/09 00:25
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	05/20/09 00:25
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
Bis(2-ethylhexyl)phthalate	A	1.2	1.1	10	J	µg, Total	1	05/20/09 00:25
Butyl benzyl phthalate	A	ND	1	10		µg, Total	1	05/20/09 00:25
Carbazole	A	ND	1.2	10		µg, Total	1	05/20/09 00:25
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/20/09 00:25
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 00:25
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/20/09 00:25
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 00:25
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/20/09 00:25
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 00:25

GMB 109

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-04B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10	µg, Total	1	05/20/09 00:25	
Hexachlorocyclopentadiene	A	ND	0.6	10	µg, Total	1	05/20/09 00:25	
Hexachloroethane	A	ND	0.9	10	µg, Total	1	05/20/09 00:25	
Isophorone	A	ND	1	10	µg, Total	1	05/20/09 00:25	
N-Nitrosodi-n-propylamine	A	ND	1	10	µg, Total	1	05/20/09 00:25	
N-Nitrosodiphenylamine	A	ND	0.7	10	µg, Total	1	05/20/09 00:25	
Nitrobenzene	A	ND	1	10	µg, Total	1	05/20/09 00:25	
Pentachlorophenol	A	ND	1.3	50	µg, Total	1	05/20/09 00:25	
Phenol	A	ND	0.4	10	µg, Total	1	05/20/09 00:25	
Surr: 2,4,6-Tribromophenol	S	49.7	0	40.5-97	%REC	1	05/20/09 00:25	
Surr: 2-Fluorobiphenyl	S	43.5	0	32.7-83.2	%REC	1	05/20/09 00:25	
Surr: 2-Fluorophenol	S	43.3	0	20.5-87.9	%REC	1	05/20/09 00:25	
Surr: Nitrobenzene-d5	S	43.5	0	33.7-77.1	%REC	1	05/20/09 00:25	
Surr: Phenol-d5	S	45.6	0	32.7-80.9	%REC	1	05/20/09 00:25	
Surr: Terphenyl-d14	S	29.8	0	22.7-96.5	%REC	1	05/20/09 00:25	

PAHS BY GC/MS-SIM		Method: TO-13						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0	µg, Total	1	05/20/09 00:25	
Acenaphthylene	A	ND	0.22	1.0	µg, Total	1	05/20/09 00:25	
Anthracene	A	ND	0.27	1.0	µg, Total	1	05/20/09 00:25	
Benzo[a]anthracene	A	ND	0.47	1.0	µg, Total	1	05/20/09 00:25	
Benzo[a]pyrene	A	ND	0.38	1.0	µg, Total	1	05/20/09 00:25	
Benzo[b]fluoranthene	A	ND	0.44	1.0	µg, Total	1	05/20/09 00:25	
Benzo[g,h,i]perylene	A	ND	0.72	1.0	µg, Total	1	05/20/09 00:25	
Benzo[k]fluoranthene	A	ND	0.8	1.0	µg, Total	1	05/20/09 00:25	
Chrysene	A	ND	0.57	1.0	µg, Total	1	05/20/09 00:25	
Dibenz[a,h]anthracene	A	ND	0.54	1.0	µg, Total	1	05/20/09 00:25	
Fluoranthene	A	ND	0.39	1.0	µg, Total	1	05/20/09 00:25	
Fluorene	A	ND	0.25	1.0	µg, Total	1	05/20/09 00:25	
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0	µg, Total	1	05/20/09 00:25	
Naphthalene	A	ND	0.16	1.0	µg, Total	1	05/20/09 00:25	
Phenanthrene	A	ND	0.27	1.0	µg, Total	1	05/20/09 00:25	
Pyrene	A	ND	0.44	1.0	µg, Total	1	05/20/09 00:25	
Surr: Nitrobenzene-d5	S	43.5	0	33.7-77.1	%REC	1	05/20/09 00:25	
Surr: 2-Fluorobiphenyl	S	43.5	0	32.7-83.2	%REC	1	05/20/09 00:25	
Surr: Terphenyl-d14	S	29.8	0	22.7-96.5	%REC	1	05/20/09 00:25	

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-05B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
1,2,4-Trichlorobenzene		A	ND	0.7	10	µg, Total	1	05/20/09 00:43
1,2-Dichlorobenzene		A	ND	0.8	10	µg, Total	1	05/20/09 00:43
1,3-Dichlorobenzene		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
1,4-Dichlorobenzene		A	ND	1.5	10	µg, Total	1	05/20/09 00:43
2,4,5-Trichlorophenol		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
2,4,6-Trichlorophenol		A	ND	0.7	10	µg, Total	1	05/20/09 00:43
2,4-Dichlorophenol		A	ND	0.8	10	µg, Total	1	05/20/09 00:43
2,4-Dimethylphenol		A	ND	9.4	50	µg, Total	1	05/20/09 00:43
2,4-Dinitrophenol		A	ND	0.8	10	µg, Total	1	05/20/09 00:43
2,4-Dinitrotoluene		A	ND	1.1	10	µg, Total	1	05/20/09 00:43
2-Chloronaphthalene		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
2-Chlorophenol		A	ND	0.7	10	µg, Total	1	05/20/09 00:43
2-Methylnaphthalene		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
2-Methylphenol		A	ND	0.7	10	µg, Total	1	05/20/09 00:43
2-Nitroaniline		A	ND	1	50	µg, Total	1	05/20/09 00:43
2-Nitrophenol		A	ND	1	10	µg, Total	1	05/20/09 00:43
3,3'-Dichlorobenzidine		A	ND	0.7	50	µg, Total	1	05/20/09 00:43
3-Nitroaniline		A	ND	1.3	50	µg, Total	1	05/20/09 00:43
3/4-Methylphenol		A	ND	0.8	10	µg, Total	1	05/20/09 00:43
4,6-Dinitro-2-methylphenol		A	ND	1.1	50	µg, Total	1	05/20/09 00:43
4-Bromophenyl phenyl ether		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
4-Chloro-3-methylphenol		A	ND	1.2	20	µg, Total	1	05/20/09 00:43
4-Chloroaniline		A	ND	1	10	µg, Total	1	05/20/09 00:43
4-Chlorophenyl phenyl ether		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
4-Nitroaniline		A	ND	1.7	50	µg, Total	1	05/20/09 00:43
4-Nitrophenol		A	ND	4.3	50	µg, Total	1	05/20/09 00:43
Bis(2-chloroethoxy)methane		A	ND	1	10	µg, Total	1	05/20/09 00:43
Bis(2-chloroethyl)ether		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
Bis(2-chloroisopropyl)ether		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
Bis(2-ethylhexyl)phthalate		A	1.6	1.1	10	J µg, Total	1	05/20/09 00:43
Butyl benzyl phthalate		A	ND	1	10	µg, Total	1	05/20/09 00:43
Carbazole		A	ND	1.2	10	µg, Total	1	05/20/09 00:43
Di-n-butyl phthalate		A	ND	1.2	10	µg, Total	1	05/20/09 00:43
Di-n-octyl phthalate		A	ND	1.1	10	µg, Total	1	05/20/09 00:43
Dibenzofuran		A	ND	0.8	10	µg, Total	1	05/20/09 00:43
Diethyl phthalate		A	ND	1.1	10	µg, Total	1	05/20/09 00:43
Dimethyl phthalate		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
Hexachlorobenzene		A	ND	0.9	10	µg, Total	1	05/20/09 00:43

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

E/Molag

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-05B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
Hexachlorobutadiene		A	ND	0.6	10	µg, Total	1	05/20/09 00:43
Hexachlorocyclopentadiene		A	ND	0.9	10	µg, Total	1	05/20/09 00:43
Isophorone		A	ND	1	10	µg, Total	1	05/20/09 00:43
N-Nitrosodi-n-propylamine		A	ND	1	10	µg, Total	1	05/20/09 00:43
N-Nitrosodiphenylamine		A	ND	0.7	10	µg, Total	1	05/20/09 00:43
Nitrobenzene		A	ND	1	10	µg, Total	1	05/20/09 00:43
Pentachlorophenol		A	ND	1.3	50	µg, Total	1	05/20/09 00:43
Phenol		A	ND	0.4	10	µg, Total	1	05/20/09 00:43
<i>Surr: 2,4,6-Tribromophenol</i>	S	36.9	0	40.5-97	S	%REC	1	05/20/09 00:43
<i>Surr: 2-Fluorobiphenyl</i>	S	31.2	0	32.7-83.2	S	%REC	1	05/20/09 00:43
<i>Surr: 2-Fluorophenol</i>	S	35.1	0	20.5-87.9		%REC	1	05/20/09 00:43
<i>Surr: Nitrobenzene-d5</i>	S	33.9	0	33.7-77.1		%REC	1	05/20/09 00:43
<i>Surr: Phenol-d5</i>	S	36.4	0	32.7-80.9		%REC	1	05/20/09 00:43
<i>Surr: Terphenyl-d14</i>	S	22.7	0	22.7-96.5	S	%REC	1	05/20/09 00:43

PAHS BY GC/MS-SIM		Method: TO-13						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
		A	ND	0.21	1.0	µg, Total	1	05/20/09 00:43
Acenaphthene		A	ND	0.22	1.0	µg, Total	1	05/20/09 00:43
Acenaphthylene		A	ND	0.27	1.0	µg, Total	1	05/20/09 00:43
Anthracene		A	ND	0.47	1.0	µg, Total	1	05/20/09 00:43
Benzo[a]anthracene		A	ND	0.38	1.0	µg, Total	1	05/20/09 00:43
Benzo[a]pyrene		A	ND	0.44	1.0	µg, Total	1	05/20/09 00:43
Benzo[b]fluoranthene		A	ND	0.72	1.0	µg, Total	1	05/20/09 00:43
Benzo[g,h,i]perylene		A	ND	0.8	1.0	µg, Total	1	05/20/09 00:43
Chrysene		A	ND	0.57	1.0	µg, Total	1	05/20/09 00:43
Dibenz[a,h]anthracene		A	ND	0.54	1.0	µg, Total	1	05/20/09 00:43
Fluoranthene		A	ND	0.39	1.0	µg, Total	1	05/20/09 00:43
Fluorene		A	ND	0.25	1.0	µg, Total	1	05/20/09 00:43
Indeno[1,2,3cd]pyrene		A	ND	0.56	1.0	µg, Total	1	05/20/09 00:43
Naphthalene		A	ND	0.16	1.0	µg, Total	1	05/20/09 00:43
Phenanthrene		A	ND	0.27	1.0	µg, Total	1	05/20/09 00:43
Pyrene		A	ND	0.44	1.0	µg, Total	1	05/20/09 00:43
<i>Surr: Nitrobenzene-d5</i>	S	33.9	0	33.7-77.1		%REC	1	05/20/09 00:43
<i>Surr: 2-Fluorobiphenyl</i>	S	31.2	0	32.7-83.2	S	%REC	1	05/20/09 00:43
<i>Surr: Terphenyl-d14</i>	S	22.7	0	22.7-96.5	S	%REC	1	05/20/09 00:43

M. Molloy



Microbac
ANALYTICAL RESULTS

 Date: *Monday, June 01, 2009*

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-06B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD							Prep Date/Time: 05/18/09 13:17 Analyst: BEM	
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	05/20/09 01:02		
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/20/09 01:02		
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/20/09 01:02		
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 01:02		
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 01:02		
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	05/20/09 01:02		
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	05/20/09 01:02		
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	05/20/09 01:02		
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 01:02		
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/20/09 01:02		
2-Nitroaniline	A	ND	1	50		µg, Total	1	05/20/09 01:02		
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/20/09 01:02		
3,3'-Dichlorobenzidine	A	ND	0.7	50		µg, Total	1	05/20/09 01:02		
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	05/20/09 01:02		
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 01:02		
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	05/20/09 01:02		
4-Bromophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/20/09 01:02		
4-Chloroaniline	A	ND	1	10		µg, Total	1	05/20/09 01:02		
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	05/20/09 01:02		
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/20/09 01:02		
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	05/20/09 01:02		
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
Bis(2-ethylhexyl)phthalate	A	1.8	1.1	10	J	µg, Total	1	05/20/09 01:02		
Butyl benzyl phthalate	A	ND	1	10		µg, Total	1	05/20/09 01:02		
Carbazole	A	ND	1.2	10		µg, Total	1	05/20/09 01:02		
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/20/09 01:02		
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 01:02		
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/20/09 01:02		
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 01:02		
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 01:02		

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-06B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
		A	ND	0.9	10	µg, Total	1	05/20/09 01:02
Hexachlorobutadiene		A	ND	0.6	10	µg, Total	1	05/20/09 01:02
Hexachlorocyclopentadiene		A	ND	0.9	10	µg, Total	1	05/20/09 01:02
Hexachloroethane		A	ND	1	10	µg, Total	1	05/20/09 01:02
Isophorone		A	ND	1	10	µg, Total	1	05/20/09 01:02
N-Nitrosodi-n-propylamine		A	ND	1	10	µg, Total	1	05/20/09 01:02
N-Nitrosodiphenylamine		A	ND	0.7	10	µg, Total	1	05/20/09 01:02
Nitrobenzene		A	ND	1	10	µg, Total	1	05/20/09 01:02
Pentachlorophenol		A	ND	1.3	50	µg, Total	1	05/20/09 01:02
Phenol		A	ND	0.4	10	µg, Total	1	05/20/09 01:02
<i>Surr: 2,4,6-Tribromophenol</i>	S	40.8	0	40.5-97	%REC	1	05/20/09 01:02	
<i>Surr: 2-Fluorobiphenyl</i>	S	34.6	0	32.7-83.2	%REC	1	05/20/09 01:02	
<i>Surr: 2-Fluorophenol</i>	S	35.8	0	20.5-87.9	%REC	1	05/20/09 01:02	
<i>Surr: Nitrobenzene-d5</i>	S	36.8	0	33.7-77.1	%REC	1	05/20/09 01:02	
<i>Surr: Phenol-d5</i>	S	38.8	0	32.7-80.9	%REC	1	05/20/09 01:02	
<i>Surr: Terphenyl-d14</i>	S	27.2	0	22.7-96.5	%REC	1	05/20/09 01:02	

PAHS BY GC/MS-SIM		Method: TO-13							
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM							
		A	ND	0.21	1.0	µg, Total	1	05/20/09 01:02	
Acenaphthene		A	ND	0.22	1.0	µg, Total	1	05/20/09 01:02	
Acenaphthylene		A	ND	0.27	1.0	µg, Total	1	05/20/09 01:02	
Anthracene		A	ND	0.47	1.0	µg, Total	1	05/20/09 01:02	
Benzo[a]anthracene		A	ND	0.38	1.0	µg, Total	1	05/20/09 01:02	
Benzo[a]pyrene		A	ND	0.44	1.0	µg, Total	1	05/20/09 01:02	
Benzo[b]fluoranthene		A	ND	0.72	1.0	µg, Total	1	05/20/09 01:02	
Benzo[g,h,i]perylene		A	ND	0.8	1.0	µg, Total	1	05/20/09 01:02	
Benzo[k]fluoranthene		A	ND	0.57	1.0	µg, Total	1	05/20/09 01:02	
Chrysene		A	ND	0.54	1.0	µg, Total	1	05/20/09 01:02	
Dibenz[a,h]anthracene		A	ND	0.39	1.0	µg, Total	1	05/20/09 01:02	
Fluoranthene		A	ND	0.25	1.0	µg, Total	1	05/20/09 01:02	
Fluorene		A	ND	0.56	1.0	µg, Total	1	05/20/09 01:02	
Indeno[1,2,3cd]pyrene		A	ND	0.16	1.0	µg, Total	1	05/20/09 01:02	
Naphthalene		A	1.3	0.27	1.0	µg, Total	1	05/20/09 01:02	
Phenanthrene		A	ND	0.44	1.0	µg, Total	1	05/20/09 01:02	
Pyrene		A	ND	36.8	0	33.7-77.1	%REC	1	05/20/09 01:02
<i>Surr: Nitrobenzene-d5</i>	S	34.6	0	32.7-83.2	%REC	1	05/20/09 01:02		
<i>Surr: 2-Fluorobiphenyl</i>	S	27.2	0	22.7-96.5	%REC	1	05/20/09 01:02		

5/10/09

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-07B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
1,2,4-Trichlorobenzene		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
1,2-Dichlorobenzene		A	1.4	0.7	10	µg, Total	1	05/20/09 01:20
1,3-Dichlorobenzene		A	ND	0.8	10	µg, Total	1	05/20/09 01:20
1,4-Dichlorobenzene		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
2,4,5-Trichlorophenol		A	ND	1.5	10	µg, Total	1	05/20/09 01:20
2,4,6-Trichlorophenol		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
2,4-Dichlorophenol		A	ND	0.7	10	µg, Total	1	05/20/09 01:20
2,4-Dimethylphenol		A	ND	0.8	10	µg, Total	1	05/20/09 01:20
2,4-Dinitrophenol		A	ND	9.4	50	µg, Total	1	05/20/09 01:20
2,4-Dinitrotoluene		A	ND	0.8	10	µg, Total	1	05/20/09 01:20
2,6-Dinitrotoluene		A	ND	1.1	10	µg, Total	1	05/20/09 01:20
2-Chloronaphthalene		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
2-Chlorophenol		A	ND	0.7	10	µg, Total	1	05/20/09 01:20
2-Methylnaphthalene		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
2-Methylphenol		A	ND	0.7	10	µg, Total	1	05/20/09 01:20
2-Nitroaniline		A	ND	1	50	µg, Total	1	05/20/09 01:20
2-Nitrophenol		A	ND	1	10	µg, Total	1	05/20/09 01:20
3,3'-Dichlorobenzidine		A	ND	0.7	50	µg, Total	1	05/20/09 01:20
3-Nitroaniline		A	ND	1.3	50	µg, Total	1	05/20/09 01:20
3/4-Methylphenol		A	ND	0.8	10	µg, Total	1	05/20/09 01:20
4,6-Dinitro-2-methylphenol		A	ND	1.1	50	µg, Total	1	05/20/09 01:20
4-Bromophenyl phenyl ether		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
4-Chloro-3-methylphenol		A	ND	1.2	20	µg, Total	1	05/20/09 01:20
4-Chloroaniline		A	ND	1	10	µg, Total	1	05/20/09 01:20
4-Chlorophenyl phenyl ether		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
4-Nitroaniline		A	ND	1.7	50	µg, Total	1	05/20/09 01:20
4-Nitrophenol		A	ND	4.3	50	µg, Total	1	05/20/09 01:20
Bis(2-chloroethoxy)methane		A	ND	1	10	µg, Total	1	05/20/09 01:20
Bis(2-chloroethyl)ether		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
Bis(2-chloroisopropyl)ether		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
Bis(2-ethylhexyl)phthalate		A	1.9	1.1	10	J µg, Total	1	05/20/09 01:20
Butyl benzyl phthalate		A	ND	1	10	µg, Total	1	05/20/09 01:20
Carbazole		A	ND	1.2	10	µg, Total	1	05/20/09 01:20
Di-n-butyl phthalate		A	ND	1.2	10	µg, Total	1	05/20/09 01:20
Di-n-octyl phthalate		A	ND	1.1	10	µg, Total	1	05/20/09 01:20
Dibenzofuran		A	ND	0.8	10	µg, Total	1	05/20/09 01:20
Diethyl phthalate		A	ND	1.1	10	µg, Total	1	05/20/09 01:20
Dimethyl phthalate		A	ND	0.9	10	µg, Total	1	05/20/09 01:20
Hexachlorobenzene		A	ND	0.9	10	µg, Total	1	05/20/09 01:20

6/16/09

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-07B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method:	Prep Date/Time: 05/18/09 13:17 Analyst: BEM					
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/20/09 01:20
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/20/09 01:20
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/20/09 01:20
Isophorone	A	1.6		10	J	µg, Total	1	05/20/09 01:20
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/20/09 01:20
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/20/09 01:20
Nitrobenzene	A	ND	1	10		µg, Total	1	05/20/09 01:20
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/20/09 01:20
Phenol	A	ND	0.4	10		µg, Total	1	05/20/09 01:20
Surr: 2,4,6-Tribromophenol	S	50.0	0	40.5-97		%REC	1	05/20/09 01:20
Surr: 2-Fluorobiphenyl	S	41.3	0	32.7-83.2		%REC	1	05/20/09 01:20
Surr: 2-Fluorophenol	S	40.5	0	20.5-87.9		%REC	1	05/20/09 01:20
Surr: Nitrobenzene-d5	S	42.1	0	33.7-77.1		%REC	1	05/20/09 01:20
Surr: Phenol-d5	S	44.8	0	32.7-80.9		%REC	1	05/20/09 01:20
Surr: Terphenyl-d14	S	31.4	0	22.7-96.5		%REC	1	05/20/09 01:20

PAHS BY GC/MS-SIM		Method:	Prep Date/Time: 05/18/09 13:17 Analyst: BEM					
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/20/09 01:20
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/20/09 01:20
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/20/09 01:20
Benzo[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/20/09 01:20
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/20/09 01:20
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/20/09 01:20
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/20/09 01:20
Benzo[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/20/09 01:20
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/20/09 01:20
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/20/09 01:20
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/20/09 01:20
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/20/09 01:20
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/20/09 01:20
Naphthalene	A	2.5	0.16	1.0		µg, Total	1	05/20/09 01:20
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/20/09 01:20
Pyrene	A	ND	0.44	1.0		µg, Total	1	05/20/09 01:20
Surr: Nitrobenzene-d5	S	42.1	0	33.7-77.1		%REC	1	05/20/09 01:20
Surr: 2-Fluorobiphenyl	S	41.3	0	32.7-83.2		%REC	1	05/20/09 01:20
Surr: Terphenyl-d14	S	31.4	0	22.7-96.5		%REC	1	05/20/09 01:20

8/10/09

ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-08B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method:	Prep Date/Time: 05/18/09 13:17 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	05/20/09 01:38
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	05/20/09 01:38
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	05/20/09 01:38
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 01:38
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 01:38
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	05/20/09 01:38
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	05/20/09 01:38
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	05/20/09 01:38
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	05/20/09 01:38
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
2-Methylphenol	A	ND	0.7	10		µg, Total	1	05/20/09 01:38
2-Nitroaniline	A	ND	1	50		µg, Total	1	05/20/09 01:38
2-Nitrophenol	A	ND	1	10		µg, Total	1	05/20/09 01:38
3,3'-Dichlorobenzidine	A	ND	0.7	50		µg, Total	1	05/20/09 01:38
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	05/20/09 01:38
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	05/20/09 01:38
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	05/20/09 01:38
4-Bromophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	05/20/09 01:38
4-Chloroaniline	A	ND	1	10		µg, Total	1	05/20/09 01:38
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	05/20/09 01:38
4-Nitrophenol	A	ND	4.3	50		µg, Total	1	05/20/09 01:38
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	05/20/09 01:38
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
Bis(2-ethylhexyl)phthalate	A	1.4	1.1	10	J	µg, Total	1	05/20/09 01:38
Butyl benzyl phthalate	A	ND	1	10		µg, Total	1	05/20/09 01:38
Carbazole	A	ND	1.2	10		µg, Total	1	05/20/09 01:38
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	05/20/09 01:38
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 01:38
Dibenzofuran	A	ND	0.8	10		µg, Total	1	05/20/09 01:38
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	05/20/09 01:38
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	05/20/09 01:38

6/10/09


ANALYTICAL RESULTS

Date: Monday, June 01, 2009

Client: MWH, Inc.
Client Project: May 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0905501-08B
Collection Date: 05/12/09 00:00
Date Received: 05/12/09 13:15

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE Method: TO-13MOD		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	05/20/09 01:38
Hexachloroethane	A	ND	0.9	10		µg, Total	1	05/20/09 01:38
Isophorone	A	ND	1	10		µg, Total	1	05/20/09 01:38
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	05/20/09 01:38
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	05/20/09 01:38
Nitrobenzene	A	ND	1	10		µg, Total	1	05/20/09 01:38
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	05/20/09 01:38
Phenol	A	ND	0.4	10		µg, Total	1	05/20/09 01:38
Surr: 2,4,6-Tribromophenol	S	35.2	0	40.5-97	S	%REC	1	05/20/09 01:38
Surr: 2-Fluorobiphenyl	S	32.2	0	32.7-83.2	S	%REC	1	05/20/09 01:38
Surr: 2-Fluorophenol	S	34.7	0	20.5-87.9		%REC	1	05/20/09 01:38
Surr: Nitrobenzene-d5	S	33.5	0	33.7-77.1	S	%REC	1	05/20/09 01:38
Surr: Phenol-d5	S	36.4	0	32.7-80.9		%REC	1	05/20/09 01:38
Surr: Terphenyl-d14	S	21.3	0	22.7-96.5	S	%REC	1	05/20/09 01:38

PAHS BY GC/MS-SIM Method: TO-13		Prep Date/Time: 05/18/09 13:17 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	05/20/09 01:38
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	05/20/09 01:38
Anthracene	A	ND	0.27	1.0		µg, Total	1	05/20/09 01:38
Benz[a]anthracene	A	ND	0.47	1.0		µg, Total	1	05/20/09 01:38
Benz[a]pyrene	A	ND	0.38	1.0		µg, Total	1	05/20/09 01:38
Benz[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	05/20/09 01:38
Benz[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	05/20/09 01:38
Benz[k]fluoranthene	A	ND	0.8	1.0		µg, Total	1	05/20/09 01:38
Chrysene	A	ND	0.57	1.0		µg, Total	1	05/20/09 01:38
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	05/20/09 01:38
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	05/20/09 01:38
Fluorene	A	ND	0.25	1.0		µg, Total	1	05/20/09 01:38
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	05/20/09 01:38
Naphthalene	A	ND	0.16	1.0		µg, Total	1	05/20/09 01:38
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	05/20/09 01:38
Pyrene	A	ND	0.44	1.0		µg, Total	1	05/20/09 01:38
Surr: Nitrobenzene-d5	S	33.5	0	33.7-77.1	S	%REC	1	05/20/09 01:38
Surr: 2-Fluorobiphenyl	S	32.2	0	32.7-83.2	S	%REC	1	05/20/09 01:38
Surr: Terphenyl-d14	S	21.3	0	22.7-96.5	S	%REC	1	05/20/09 01:38

6/1/10/09

June 10, 2009 Off-Gas Sample Laboratory Results

ANALYTICAL RESULTSDate: *Tuesday, June 30, 2009*

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-01A
Collection Date: 06/10/09 13:13
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method: TO-15		Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	8900	88	290	ppbv	600	06/25/09 01:46	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	06/25/09 05:52	
1,1,2-Trichloroethane	A	82	10	30	ppbv	60	06/25/09 05:52	
1,1-Dichloroethane	A	1700	82	290	ppbv	600	06/25/09 01:46	
1,1-Dichloroethene	A	34	10	30	ppbv	60	06/25/09 05:52	
1,2-Dichloroethane	A	290	10	30	ppbv	60	06/25/09 05:52	
1,2-Dichloropropane	A	75	8.4	30	ppbv	60	06/25/09 05:52	
2-Butanone	A	1800	71	1200	ppbv	600	06/25/09 01:46	
2-Hexanone	A	ND	20	120	ppbv	60	06/25/09 05:52	
4-Methyl-2-Pentanone	A	1400	140	290	ppbv	600	06/25/09 01:46	
Acetone	A	2000	330	1200	ppbv	600	06/25/09 01:46	
Benzene	A	3900	71	290	ppbv	600	06/25/09 01:46	J
Bromodichloromethane	A	32	9	30	ppbv	60	06/25/09 05:52	
Bromoform	A	ND	10	30	ppbv	60	06/25/09 05:52	
Bromomethane	A	ND	11	30	ppbv	60	06/25/09 05:52	
Carbon disulfide	A	ND	11	30	ppbv	60	06/25/09 05:52	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	06/25/09 05:52	
Chlorobenzene	A	ND	9.6	30	ppbv	60	06/25/09 05:52	
Chloroethane	A	48	10	30	ppbv	60	06/25/09 05:52	
Chloroform	A	1000	7.2	30	ppbv	60	06/25/09 05:52	
Chloromethane	A	20	14	120	ppbv	60	06/25/09 05:52	
cis-1,2-Dichloroethene	A	970	8.4	30	ppbv	60	06/25/09 05:52	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	06/25/09 05:52	
Dibromochloromethane	A	ND	10	30	ppbv	60	06/25/09 05:52	
Ethyl benzene	A	3300	110	290	ppbv	600	06/25/09 01:46	
m,p-Xylene	A	14000	180	590	ppbv	600	06/25/09 01:46	
Methylene chloride	A	9500	82	2400	ppbv	600	06/25/09 01:46	B
o-Xylene	A	5600	100	290	ppbv	600	06/25/09 01:46	
Styrene	A	170	11	30	ppbv	60	06/25/09 05:52	
Tetrachloroethene	A	6300	100	290	ppbv	600	06/25/09 01:46	
Toluene	A	36000	490	1400	ppbv	600	06/25/09 03:49	
trans-1,2-Dichloroethene	A	ND	19	30	ppbv	60	06/25/09 05:52	
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	06/25/09 05:52	
Trichloroethene	A	5700	94	290	ppbv	600	06/25/09 01:46	
Vinyl chloride	A	130	9	30	ppbv	60	06/25/09 05:52	
<i>Surr: 4-Bromofluorobenzene</i>	S	118	0	77.7-127	%REC	60	06/25/09 05:52	

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

8/31/09

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-02A
Collection Date: 06/10/09 13:17
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method: TO-15		Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	7200	90	300	ppbv	600	06/25/09 02:27	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	06/25/09 06:34	
1,1,2-Trichloroethane	A	23	10	30	J	ppbv	60	06/25/09 06:34
1,1-Dichloroethane	A	960	8.4	30	ppbv	60	06/25/09 06:34	
1,1-Dichloroethene	A	28	10	30	J	ppbv	60	06/25/09 06:34
1,2-Dichloroethane	A	120	10	30	ppbv	60	06/25/09 06:34	
1,2-Dichloropropane	A	68	8.4	30	ppbv	60	06/25/09 06:34	
2-Butanone	A	410	7.2	120	ppbv	60	06/25/09 06:34	
2-Hexanone	A	ND	20	120	ppbv	60	06/25/09 06:34	
4-Methyl-2-Pentanone	A	430	14	30	ppbv	60	06/25/09 06:34	
Acetone	A	790	34	120	1	ppbv	60	06/25/09 06:34
Benzene	A	1400	72	300	ppbv	600	06/25/09 02:27	
Bromodichloromethane	A	ND	9	30	ppbv	60	06/25/09 06:34	
Bromoform	A	ND	10	30	ppbv	60	06/25/09 06:34	
Bromomethane	A	ND	11	30	ppbv	60	06/25/09 06:34	
Carbon disulfide	A	ND	11	30	ppbv	60	06/25/09 06:34	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	06/25/09 06:34	
Chlorobenzene	A	ND	9.6	30	ppbv	60	06/25/09 06:34	
Chloroethane	A	29	10	30	J	ppbv	60	06/25/09 06:34
Chloroform	A	1500	72	300	ppbv	600	06/25/09 02:27	
Chloromethane	A	ND	14	120	ppbv	60	06/25/09 06:34	
cis-1,2-Dichloroethene	A	2600	84	300	ppbv	600	06/25/09 02:27	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	06/25/09 06:34	
Dibromochloromethane	A	ND	10	30	ppbv	60	06/25/09 06:34	
Ethyl benzene	A	1700	110	300	ppbv	600	06/25/09 06:34	
m,p-Xylene	A	7000	180	600	ppbv	600	06/25/09 02:27	
Methylene chloride	A	2600	84	2400	B	ppbv	600	06/25/09 02:27
o-Xylene	A	3100	100	300	ppbv	600	06/25/09 02:27	
Styrene	A	43	11	30	ppbv	60	06/25/09 06:34	
Tetrachloroethene	A	6200	100	300	ppbv	600	06/25/09 02:27	
Toluene	A	9000	110	300	ppbv	600	06/25/09 02:27	
trans-1,2-Dichloroethene	A	23	19	30	J	ppbv	60	06/25/09 06:34
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	06/25/09 06:34	
Trichloroethene	A	4600	96	300	ppbv	600	06/25/09 02:27	
Vinyl chloride	A	140	9	30	ppbv	60	06/25/09 06:34	
Surr. 4-Bromofluorobenzene	S	106	0	77.7-127	%REC	60	06/25/09 06:34	

173109

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-03A
Collection Date: 06/10/09 13:03
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15			Prep Date/Time:		Analyst: MAK
1,1,1-Trichloroethane	A	6800	86	290	ppbv	600	06/25/09 03:09
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	06/25/09 07:16
1,1,2-Trichloroethane	A	13	10	30	J ppbv	60	06/25/09 07:16
1,1-Dichloroethane	A	820	8.4	30	ppbv	60	06/25/09 07:16
1,1-Dichloroethene	A	28	10	30	J ppbv	60	06/25/09 07:16
1,2-Dichloroethane	A	82	10	30	ppbv	60	06/25/09 07:16
1,2-Dichloropropane	A	67	8.4	30	ppbv	60	06/25/09 07:16
2-Butanone	A	160	7.2	120	ppbv	60	06/25/09 07:16
2-Hexanone	A	ND	20	120	ppbv	60	06/25/09 07:16
4-Methyl-2-Pantanone	A	260	14	30	ppbv	60	06/25/09 07:16
Acetone	A	580	34	120	J ppbv	60	06/25/09 07:16
Benzene	A	770	7.2	30	ppbv	60	06/25/09 07:16
Bromodichloromethane	A	ND	9	30	ppbv	60	06/25/09 07:16
Bromoform	A	ND	10	30	ppbv	60	06/25/09 07:16
Bromomethane	A	ND	11	30	ppbv	60	06/25/09 07:16
Carbon disulfide	A	ND	11	30	ppbv	60	06/25/09 07:16
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	06/25/09 07:16
Chlorobenzene	A	ND	9.6	30	ppbv	60	06/25/09 07:16
Chloroethane	A	22	10	30	J ppbv	60	06/25/09 07:16
Chloroform	A	1600	69	290	ppbv	600	06/25/09 03:09
Chloromethane	A	ND	14	120	ppbv	60	06/25/09 07:16
cis-1,2-Dichloroethene	A	2900	81	290	ppbv	600	06/25/09 03:09
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	06/25/09 07:16
Dibromochloromethane	A	ND	10	30	ppbv	60	06/25/09 07:16
Ethyl benzene	A	1500	100	290	ppbv	600	06/25/09 03:09
m,p-Xylene	A	5700	170	580	ppbv	600	06/25/09 03:09
Methylene chloride	A	950	8.4	240	B ppbv	60	06/25/09 07:16
o-Xylene	A	2600	98	290	ppbv	600	06/25/09 03:09
Styrene	A	24	11	30	J ppbv	60	06/25/09 07:16
Tetrachloroethene	A	6100	98	290	ppbv	600	06/25/09 03:09
Toluene	A	5500	100	290	ppbv	600	06/25/09 03:09
trans-1,2-Dichloroethene	A	25	19	30	J ppbv	60	06/25/09 07:16
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	06/25/09 07:16
Trichloroethene	A	4300	92	290	ppbv	600	06/25/09 03:09
Vinyl chloride	A	140	9	30	ppbv	60	06/25/09 07:16
Surr: 4-Bromofluorobenzene	S	102	0	77.7-127	%REC	60	06/25/09 07:16

ANALYTICAL RESULTS

Date:

Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-04A
Collection Date: 06/10/09 13:45
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15		Prep Date/Time:	Analyst: MAK		
1,1,1-Trichloroethane	A	7300	88	290	ppbv	600	06/25/09 22:50
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	06/26/09 05:39
1,1,2-Trichloroethane	A	19	10	30	J	ppbv	60 06/26/09 05:39
1,1-Dichloroethane	A	930	8.4	30	ppbv	60	06/26/09 05:39
1,1-Dichloroethene	A	28	10	30	J	ppbv	60 06/26/09 05:39
1,2-Dichloroethane	A	110	10	30	ppbv	60	06/26/09 05:39
1,2-Dichloropropane	A	68	8.4	30	ppbv	60	06/26/09 05:39
2-Butanone	A	340	7.2	120	ppbv	60	06/26/09 05:39
2-Hexanone	A	ND	20	120	ppbv	60	06/26/09 05:39
4-Methyl-2-Pentanone	A	390	14	30	ppbv	60	06/26/09 05:39
Acetone	A	820	34	120	J	ppbv	60 06/26/09 05:39
Benzene	A	1100	7.2	30	J	ppbv	60 06/26/09 05:39
Bromodichloromethane	A	ND	9	30	ppbv	60	06/26/09 05:39
Bromoform	A	ND	10	30	ppbv	60	06/26/09 05:39
Bromomethane	A	ND	11	30	ppbv	60	06/26/09 05:39
Carbon disulfide	A	ND	11	30	ppbv	60	06/26/09 05:39
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	06/26/09 05:39
Chlorobenzene	A	ND	9.6	30	ppbv	60	06/26/09 05:39
Chloroethane	A	28	10	30	J	ppbv	60 06/26/09 05:39
Chloroform	A	1600	71	290	ppbv	600	06/25/09 22:50
Chloromethane	A	ND	14	120	ppbv	60	06/26/09 05:39
cis-1,2-Dichloroethene	A	2900	82	290	ppbv	600	06/25/09 22:50
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	06/26/09 05:39
Dibromochloromethane	A	ND	10	30	ppbv	60	06/26/09 05:39
Ethyl benzene	A	1600	110	290	ppbv	600	06/25/09 22:50
m,p-Xylene	A	6200	180	590	ppbv	600	06/25/09 22:50
Methylene chloride	A	1800	82	1200	BJ	ppbv	600 06/25/09 22:50
o-Xylene	A	2900	100	290	ppbv	600	06/25/09 22:50
Styrene	A	40	11	30	ppbv	60	06/26/09 05:39
Tetrachloroethene	A	5900	100	290	ppbv	600	06/25/09 22:50
Toluene	A	6800	110	290	ppbv	600	06/25/09 22:50
trans-1,2-Dichloroethene	A	24	19	30	J	ppbv	60 06/26/09 05:39
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	06/26/09 05:39
Trichloroethene	A	4600	94	290	ppbv	600	06/25/09 22:50
Vinyl chloride	A	130	9	30	ppbv	60	06/26/09 05:39
Surr: 4-Bromofluorobenzene	S	110	0	77.7-127	%REC	60	06/26/09 05:39

6/30/09

ANALYTICAL RESULTS

Date:

Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-05A
Collection Date: 06/10/09 13:09
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS		Method: TO-15	Prep Date/Time:			Analyst: MAK		
1,1,1-Trichloroethane	A	42	1.5	4.9	ppbv	10	06/25/09 21:30	
1,1,2,2-Tetrachloroethane	A	ND	0.22	0.50	ppbv	1	06/26/09 04:16	
1,1,2-Trichloroethane	A	ND	0.17	0.50	ppbv	1	06/26/09 04:16	
1,1-Dichloroethane	A	9.9	0.14	0.50	ppbv	1	06/26/09 04:16	
1,1-Dichloroethene	A	17	0.17	0.50	ppbv	1	06/26/09 04:16	
1,2-Dichloroethane	A	1.4	0.17	0.50	ppbv	1	06/26/09 04:16	
1,2-Dichloropropane	A	ND	0.14	0.50	ppbv	1	06/26/09 04:16	
2-Butanone	A	5.8	0.12	2.0	ppbv	1	06/26/09 04:16	
2-Hexanone	A	ND	0.34	2.0	ppbv	1	06/26/09 04:16	
4-Methyl-2-Pentanone	A	6.6	0.24	0.50	ppbv	1	06/26/09 04:16	
Acetone	A	ND	0.56	2.0	ppbv	1	06/26/09 04:16	
Benzene	A	30	1.2	4.9	ppbv	10	06/25/09 21:30	
Bromodichloromethane	A	ND	0.15	0.50	ppbv	1	06/26/09 04:16	
Bromoform	A	ND	0.17	0.50	ppbv	1	06/26/09 04:16	
Bromomethane	A	ND	0.19	0.50	ppbv	1	06/26/09 04:16	
Carbon disulfide	A	ND	0.18	0.50	ppbv	1	06/26/09 04:16	
Carbon tetrachloride	A	ND	0.16	0.50	ppbv	1	06/26/09 04:16	
Chlorobenzene	A	ND	0.16	0.50	ppbv	1	06/26/09 04:16	
Chloroethane	A	ND	0.17	0.50	ppbv	1	06/26/09 04:16	
Chloroform	A	11	0.12	0.50	ppbv	1	06/26/09 04:16	
Chloromethane	A	0.94	0.23	2.0	J	ppbv	1	06/26/09 04:16
cis-1,2-Dichloroethene	A	19	0.14	0.50	ppbv	1	06/26/09 04:16	
cis-1,3-Dichloropropene	A	ND	0.14	0.50	ppbv	1	06/26/09 04:16	
Dibromochloromethane	A	ND	0.17	0.50	ppbv	1	06/26/09 04:16	
Ethyl benzene	A	18	0.18	0.50	ppbv	1	06/26/09 04:16	
m,p-Xylene	A	47	2.9	9.8	ppbv	10	06/25/09 21:30	
Methylene chloride	A	21	1.4	20	B	ppbv	10	06/25/09 21:30
o-Xylene	A	20	1.7	4.9	ppbv	10	06/25/09 21:30	
Styrene	A	3.0	0.19	0.50	ppbv	1	06/26/09 04:16	
Tetrachloroethene	A	42	1.7	4.9	ppbv	10	06/25/09 21:30	
Toluene	A	63	1.8	4.9	ppbv	10	06/25/09 21:30	
trans-1,2-Dichloroethene	A	2.0	0.31	0.50	ppbv	1	06/26/09 04:16	
trans-1,3-Dichloropropene	A	ND	0.12	0.50	ppbv	1	06/26/09 04:16	
Trichloroethene	A	32	1.6	4.9	ppbv	10	06/25/09 21:30	
Vinyl chloride	A	3.7	0.15	0.50	ppbv	1	06/26/09 04:16	
Surr: 4-Bromofluorobenzene	S	107	0	77.7-127	%REC	1	06/26/09 04:16	

ANALYTICAL RESULTS

Date:

Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-06A
Collection Date: 06/10/09 13:50
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method:	TO-15			Prep Date/Time:		Analyst:	MAK
1,1,1-Trichloroethane	A	8300	88	290	ppbv	600	06/25/09 23:31	
1,1,2,2-Tetrachloroethane	A	ND	13	30	ppbv	60	06/29/09 14:53	
1,1,2-Trichloroethane	A	55	10	30	ppbv	60	06/29/09 14:53	
1,1-Dichloroethane	A	1600	82	290	ppbv	600	06/25/09 23:31	
1,1-Dichloroethene	A	28	10	30	J	ppbv	60	06/29/09 14:53
1,2-Dichloroethane	A	190	10	30	ppbv	60	06/29/09 14:53	
1,2-Dichloropropane	A	53	8.4	30	ppbv	60	06/29/09 14:53	
2-Butanone	A	1100	7.2	120	ppbv	60	06/29/09 14:53	
2-Hexanone	A	ND	20	120	ppbv	60	06/29/09 14:53	
4-Methyl-2-Pentanone	A	850	14	30	ppbv	60	06/29/09 14:53	
Acetone	A	1900	330	1200	ppbv	600	06/25/09 23:31	
Benzene	A	3600	71	290	ppbv	600	06/25/09 23:31	
Bromodichloromethane	A	ND	9	30	ppbv	60	06/29/09 14:53	
Bromoform	A	ND	10	30	ppbv	60	06/29/09 14:53	
Bromomethane	A	ND	11	30	ppbv	60	06/29/09 14:53	
Carbon disulfide	A	ND	11	30	ppbv	60	06/29/09 14:53	
Carbon tetrachloride	A	ND	9.6	30	ppbv	60	06/29/09 14:53	
Chlorobenzene	A	ND	9.6	30	ppbv	60	06/29/09 14:53	
Chloroethane	A	53	10	30	ppbv	60	06/29/09 14:53	
Chloroform	A	690	7.2	30	ppbv	60	06/29/09 14:53	
Chloromethane	A	17	14	120	J	ppbv	60	06/29/09 14:53
cis-1,2-Dichloroethene	A	720	8.4	30	ppbv	60	06/29/09 14:53	
cis-1,3-Dichloropropene	A	ND	8.4	30	ppbv	60	06/29/09 14:53	
Dibromochloromethane	A	ND	10	30	ppbv	60	06/29/09 14:53	
Ethyl benzene	A	2900	110	290	ppbv	600	06/25/09 23:31	
m,p-Xylene	A	12000	180	590	ppbv	600	06/25/09 23:31	
Methylene chloride	A	9000	82	2400	B	ppbv	600	06/25/09 23:31
o-Xylene	A	5000	100	290	ppbv	600	06/25/09 23:31	
Styrene	A	98	11	30	ppbv	60	06/29/09 14:53	
Tetrachloroethene	A	5300	100	290	ppbv	600	06/25/09 23:31	
Toluene	A	32000	540	1500	ppbv	3,000	06/26/09 02:54	
trans-1,2-Dichloroethene	A	ND	19	30	ppbv	60	06/29/09 14:53	
trans-1,3-Dichloropropene	A	ND	7.2	30	ppbv	60	06/29/09 14:53	
Trichloroethene	A	5400	94	290	ppbv	600	06/25/09 23:31	
Vinyl chloride	A	98	9	30	ppbv	60	06/29/09 14:53	
Surr: 4-Bromofluorobenzene	S	98.7	0	77.7-127	%REC	60	06/29/09 14:53	

6/31/09

ANALYTICAL RESULTS

Date:

Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-07A
Collection Date: 06/10/09 14:10
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS	Method: TO-15		Prep Date/Time:			Analyst: MAK	
1,1,1-Trichloroethane	A	550	9	30	ppbv	60	06/29/09 15:34
1,1,2,2-Tetrachloroethane	A	ND	2.2	5.0	ppbv	10	06/29/09 16:25
1,1,2-Trichloroethane	A	2.1	1.7	5.0	J ppbv	10	06/29/09 16:25
1,1-Dichloroethane	A	92	1.4	5.0	ppbv	10	06/29/09 16:25
1,1-Dichloroethene	A	2.9	1.7	5.0	J ppbv	10	06/29/09 16:25
1,2-Dichloroethane	A	9.1	1.7	5.0	ppbv	10	06/29/09 16:25
1,2-Dichloropropane	A	6.3	1.4	5.0	ppbv	10	06/29/09 16:25
2-Butanone	A	17	1.2	20	J ppbv	10	06/29/09 16:25
2-Hexanone	A	ND	3.4	20	ppbv	10	06/29/09 16:25
4-Methyl-2-Pentanone	A	23	2.4	5.0	ppbv	10	06/29/09 16:25
Acetone	A	56	5.6	20	ppbv	10	06/29/09 16:25
Benzene	A	88	1.2	5.0	ppbv	10	06/29/09 16:25
Bromodichloromethane	A	ND	1.5	5.0	ppbv	10	06/29/09 16:25
Bromoform	A	ND	1.7	5.0	ppbv	10	06/29/09 16:25
Bromomethane	A	ND	1.9	5.0	ppbv	10	06/29/09 16:25
Carbon disulfide	A	ND	1.8	5.0	ppbv	10	06/29/09 16:25
Carbon tetrachloride	A	ND	1.6	5.0	ppbv	10	06/29/09 16:25
Chlorobenzene	A	ND	1.6	5.0	ppbv	10	06/29/09 16:25
Chloroethane	A	29	1.7	5.0	ppbv	10	06/29/09 16:25
Chloroform	A	110	1.2	5.0	ppbv	10	06/29/09 16:25
Chloromethane	A	ND	2.3	20	ppbv	10	06/29/09 16:25
cis-1,2-Dichloroethene	A	280	8.4	30	ppbv	60	06/29/09 15:34
cis-1,3-Dichloropropene	A	ND	1.4	5.0	ppbv	10	06/29/09 16:25
Dibromochloromethane	A	ND	1.7	5.0	ppbv	10	06/29/09 16:25
Ethyl benzene	A	160	1.8	5.0	ppbv	10	06/29/09 16:25
m,p-Xylene	A	600	18	60	ppbv	60	06/29/09 15:34
Methylene chloride	A	90	1.4	40	B ppbv	10	06/29/09 16:25
o-Xylene	A	360	10	30	ppbv	60	06/29/09 15:34
Styrene	A	4.6	1.9	5.0	J ppbv	10	06/29/09 16:25
Tetrachloroethene	A	190	10	30	ppbv	60	06/29/09 15:34
Toluene	A	530	11	30	ppbv	60	06/29/09 15:34
trans-1,2-Dichloroethene	A	4.4	3.1	5.0	J ppbv	10	06/29/09 16:25
trans-1,3-Dichloropropene	A	ND	1.2	5.0	ppbv	10	06/29/09 16:25
Trichloroethene	A	350	9.6	30	ppbv	60	06/29/09 15:34
Vinyl chloride	A	42	1.5	5.0	ppbv	10	06/29/09 16:25
Surr: 4-Bromofluorobenzene	S	122	0	77.7-127	%REC	10	06/29/09 16:25

9/3/09

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-08A
Collection Date: 06/10/09 13:58
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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TOXIC ORGANICS IN AIR BY GC/MS			Method: TO-15	Prep Date/Time:			Analyst: MAK	
1,1,1-Trichloroethane	A	180	1.5	5.0	ppbv	10	06/25/09 22:10	
1,1,2,2-Tetrachloroethane	A	ND	0.22	0.50	ppbv	1	06/26/09 04:57	
1,1,2-Trichloroethane	A	1.3	0.17	0.50	ppbv	1	06/26/09 04:57	
1,1-Dichloroethane	A	37	1.4	5.0	ppbv	10	06/25/09 22:10	
1,1-Dichloroethene	A	66	1.7	5.0	ppbv	10	06/25/09 22:10	
1,2-Dichloroethane	A	5.0	0.17	0.50	ppbv	1	06/26/09 04:57	
1,2-Dichloropropane	A	1.4	0.14	0.50	ppbv	1	06/26/09 04:57	
2-Butanone	A	14	0.12	2.0	ppbv	1	06/26/09 04:57	
2-Hexanone	A	ND	0.34	2.0	ppbv	1	06/26/09 04:57	
4-Methyl-2-Pentanone	A	9.1	0.24	0.50	ppbv	1	06/26/09 04:57	
Acetone	A	ND	0.56	2.0	ppbv	1	06/26/09 04:57	
Benzene	A	180	1.2	5.0	ppbv	10	06/25/09 22:10	
Bromodichloromethane	A	ND	0.15	0.50	ppbv	1	06/26/09 04:57	
Bromoform	A	ND	0.17	0.50	ppbv	1	06/26/09 04:57	
Bromomethane	A	ND	0.19	0.50	ppbv	1	06/26/09 04:57	
Carbon disulfide	A	ND	0.18	0.50	ppbv	1	06/26/09 04:57	
Carbon tetrachloride	A	ND	0.16	0.50	ppbv	1	06/26/09 04:57	
Chlorobenzene	A	ND	0.16	0.50	ppbv	1	06/26/09 04:57	
Chloroethane	A	1.3	0.17	0.50	ppbv	1	06/26/09 04:57	
Chloroform	A	29	1.2	5.0	ppbv	10	06/25/09 22:10	
Chloromethane	A	1.9	0.23	2.0	J	ppbv	1	06/26/09 04:57
cis-1,2-Dichloroethene	A	32	1.4	5.0	ppbv	10	06/25/09 22:10	
cis-1,3-Dichloropropene	A	ND	0.14	0.50	ppbv	1	06/26/09 04:57	
Dibromochloromethane	A	ND	0.17	0.50	ppbv	1	06/26/09 04:57	
Ethyl benzene	A	50	1.8	5.0	ppbv	10	06/25/09 22:10	
m,p-Xylene	A	180	3	10	ppbv	10	06/25/09 22:10	
Methylene chloride	A	270	7	200	B	ppbv	50	06/26/09 01:32
o-Xylene	A	72	1.7	5.0	ppbv	10	06/25/09 22:10	
Styrene	A	18	0.19	0.50	ppbv	1	06/26/09 04:57	
Tetrachloroethene	A	160	1.7	5.0	ppbv	10	06/25/09 22:10	
Toluene	A	520	9	25	ppbv	50	06/26/09 01:32	
trans-1,2-Dichloroethene	A	2.5	0.31	0.50	ppbv	1	06/26/09 04:57	
trans-1,3-Dichloropropene	A	ND	0.12	0.50	ppbv	1	06/26/09 04:57	
Trichloroethene	A	140	1.6	5.0	ppbv	10	06/25/09 22:10	
Vinyl chloride	A	0.90	0.15	0.50	ppbv	1	06/26/09 04:57	
Surr: 4-Bromofluorobenzene	S	118	0	77.7-127	%REC	1	06/26/09 04:57	

1/21/09

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-01B
Collection Date: 06/10/09 13:13
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method:	Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	06/18/09 23:57
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	06/18/09 23:57
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	06/18/09 23:57
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	06/18/09 23:57
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	06/18/09 23:57
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	06/18/09 23:57
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	06/18/09 23:57
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	06/18/09 23:57
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	06/18/09 23:57
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
2-Methylphenol	A	ND	0.7	10		µg, Total	1	06/18/09 23:57
2-Nitroaniline	A	ND	1	50		µg, Total	1	06/18/09 23:57
2-Nitrophenol	A	ND	1	10		µg, Total	1	06/18/09 23:57
3,3'-Dichlorobenzidine	A	ND	0.7	50	US	µg, Total	1	06/18/09 23:57
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	06/18/09 23:57
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	06/18/09 23:57
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	06/18/09 23:57
4-Bromophenyl phenyl ether	A	ND	0.9	10	US	µg, Total	1	06/18/09 23:57
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	06/18/09 23:57
4-Chloroaniline	A	ND	1	10		µg, Total	1	06/18/09 23:57
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	06/18/09 23:57
4-Nitrophenol	A	ND	4.3	50	US	µg, Total	1	06/18/09 23:57
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	06/18/09 23:57
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	US	µg, Total	1	06/18/09 23:57
Butyl benzyl phthalate	A	ND	1	10	US	µg, Total	1	06/18/09 23:57
Carbazole	A	ND	1.2	10		µg, Total	1	06/18/09 23:57
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	06/18/09 23:57
Di-n-octyl phthalate	A	ND	1.1	10	US	µg, Total	1	06/18/09 23:57
Dibenzofuran	A	ND	0.8	10		µg, Total	1	06/18/09 23:57
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	06/18/09 23:57
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	06/18/09 23:57
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	06/18/09 23:57

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6/3/09

ANALYTICAL RESULTS

Date:

Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #1 Offsite ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-01B
Collection Date: 06/10/09 13:13
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method: TO-13MOD		Prep Date/Time: 06/17/09 13:00 Analyst: BEM					
Hexachlorobutadiene	A	ND	0.9	10	µg, Total	1	06/18/09 23:57	
Hexachlorocyclopentadiene	A	ND	0.6	10	µg, Total	1	06/18/09 23:57	
Hexachloroethane	A	ND	0.9	10	µg, Total	1	06/18/09 23:57	
Isophorone	A	ND	1	10	µg, Total	1	06/18/09 23:57	
N-Nitrosodi-n-propylamine	A	ND	1	10	µg, Total	1	06/18/09 23:57	
N-Nitrosodiphenylamine	A	ND	0.7	10	µg, Total	1	06/18/09 23:57	
Nitrobenzene	A	ND	1	10	µg, Total	1	06/18/09 23:57	
Pentachlorophenol	A	ND	1.3	50	µg, Total	1	06/18/09 23:57	
Phenol	A	ND	0.4	10	µg, Total	1	06/18/09 23:57	
Surr: 2,4,6-Tribromophenol	S	83.9	0	40.5-97	%REC	1	06/18/09 23:57	
Surr: 2-Fluorobiphenyl	S	50.0	0	32.7-83.2	%REC	1	06/18/09 23:57	
Surr: 2-Fluorophenol	S	44.8	0	20.5-87.9	%REC	1	06/18/09 23:57	
Surr: Nitrobenzene-d5	S	64.3	0	33.7-77.1	%REC	1	06/18/09 23:57	
Surr: Phenol-d5	S	57.0	0	32.7-80.9	%REC	1	06/18/09 23:57	
Surr: Terphenyl-d14	S	45.2	0	22.7-96.5	%REC	1	06/18/09 23:57	

PAHS BY GC/MS-SIM	Method: TO-13		Prep Date/Time: 06/17/09 13:00 Analyst: BEM					
Acenaphthene	A	ND	0.21	1.0	µg, Total	1	06/18/09 23:57	
Acenaphthylene	A	ND	0.22	1.0	µg, Total	1	06/18/09 23:57	
Anthracene	A	ND	0.27	1.0	µg, Total	1	06/18/09 23:57	
Benzo[a]anthracene	A	ND	0.47	1.0	µg, Total	1	06/18/09 23:57	
Benzo[a]pyrene	A	ND	0.38	1.0	µg, Total	1	06/18/09 23:57	
Benzo[b]fluoranthene	A	ND	0.44	1.0	µg, Total	1	06/18/09 23:57	
Benzo[g,h,i]perylene	A	ND	0.72	1.0	µg, Total	1	06/18/09 23:57	
Benzo[k]fluoranthene	A	ND	0.8	1.0	µg, Total	1	06/18/09 23:57	
Chrysene	A	ND	0.57	1.0	µg, Total	1	06/18/09 23:57	
Dibenz[a,h]anthracene	A	ND	0.54	1.0	µg, Total	1	06/18/09 23:57	
Fluoranthene	A	ND	0.39	1.0	µg, Total	1	06/18/09 23:57	
Fluorene	A	ND	0.25	1.0	µg, Total	1	06/18/09 23:57	
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0	µg, Total	1	06/18/09 23:57	
Naphthalene	A	1.0	0.16	1.0	µg, Total	1	06/18/09 23:57	
Phenanthrene	A	ND	0.27	1.0	µg, Total	1	06/18/09 23:57	
Pyrene	A	ND	0.44	1.0	µg, Total	1	06/18/09 23:57	
Surr: Nitrobenzene-d5	S	64.3	0	33.7-77.1	%REC	1	06/18/09 23:57	
Surr: 2-Fluorobiphenyl	S	50.0	0	32.7-83.2	%REC	1	06/18/09 23:57	
Surr: Terphenyl-d14	S	45.2	0	22.7-96.5	%REC	1	06/18/09 23:57	



ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-02B
Collection Date: 06/10/09 13:17
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD							
		ST	Result	MDL	RL	Qual	Units	DF	Analyzed
1,2,4-Trichlorobenzene	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
1,2-Dichlorobenzene	A		ND	0.7	10		µg, Total	1	06/19/09 00:18
1,3-Dichlorobenzene	A		ND	0.8	10		µg, Total	1	06/19/09 00:18
1,4-Dichlorobenzene	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
2,4,5-Trichlorophenol	A		ND	1.5	10		µg, Total	1	06/19/09 00:18
2,4,6-Trichlorophenol	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
2,4-Dichlorophenol	A		ND	0.7	10		µg, Total	1	06/19/09 00:18
2,4-Dimethylphenol	A		ND	0.8	10		µg, Total	1	06/19/09 00:18
2,4-Dinitrophenol	A		ND	9.4	50		µg, Total	1	06/19/09 00:18
2,4-Dinitrotoluene	A		ND	0.8	10		µg, Total	1	06/19/09 00:18
2,6-Dinitrotoluene	A		ND	1.1	10		µg, Total	1	06/19/09 00:18
2-Chloronaphthalene	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
2-Chlorophenol	A		ND	0.7	10		µg, Total	1	06/19/09 00:18
2-Methylnaphthalene	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
2-Methylphenol	A		ND	0.7	10		µg, Total	1	06/19/09 00:18
2-Nitroaniline	A		ND	1	50		µg, Total	1	06/19/09 00:18
2-Nitrophenol	A		ND	1	10		µg, Total	1	06/19/09 00:18
3,3'-Dichlorobenzidine	A		ND	0.7	50	WJ	µg, Total	1	06/19/09 00:18
3-Nitroaniline	A		ND	1.3	50		µg, Total	1	06/19/09 00:18
3,4-Methylphenol	A		ND	0.8	10		µg, Total	1	06/19/09 00:18
4,6-Dinitro-2-methylphenol	A		ND	1.1	50		µg, Total	1	06/19/09 00:18
4-Bromophenyl phenyl ether	A		ND	0.9	10	WJ	µg, Total	1	06/19/09 00:18
4-Chloro-3-methylphenol	A		ND	1.2	20		µg, Total	1	06/19/09 00:18
4-Chloroaniline	A		ND	1	10		µg, Total	1	06/19/09 00:18
4-Chlorophenyl phenyl ether	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
4-Nitroaniline	A		ND	1.7	50		µg, Total	1	06/19/09 00:18
4-Nitrophenol	A		ND	4.3	50	WJ	µg, Total	1	06/19/09 00:18
Bis(2-chloroethoxy)methane	A		ND	1	10		µg, Total	1	06/19/09 00:18
Bis(2-chloroethyl)ether	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
Bis(2-chloroisopropyl)ether	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
Bis(2-ethylhexyl)phthalate	A		ND	1.1	10	WJ	µg, Total	1	06/19/09 00:18
Butyl benzyl phthalate	A		ND	1	10	WJ	µg, Total	1	06/19/09 00:18
Carbazole	A		ND	1.2	10		µg, Total	1	06/19/09 00:18
Di-n-butyl phthalate	A		ND	1.2	10		µg, Total	1	06/19/09 00:18
Di-n-octyl phthalate	A		ND	1.1	10	WJ	µg, Total	1	06/19/09 00:18
Dibenzofuran	A		ND	0.8	10		µg, Total	1	06/19/09 00:18
Diethyl phthalate	A		ND	1.1	10		µg, Total	1	06/19/09 00:18
Dimethyl phthalate	A		ND	0.9	10		µg, Total	1	06/19/09 00:18
Hexachlorobenzene	A		ND	0.9	10		µg, Total	1	06/19/09 00:18

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ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #2 SBPA ISVE
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-02B
Collection Date: 06/10/09 13:17
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method: TO-13MOD		Prep Date/Time: 06/17/09 13:00 Analyst: BEM					
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	06/19/09 00:18
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	06/19/09 00:18
Hexachloroethane	A	ND	0.9	10		µg, Total	1	06/19/09 00:18
Isophorone	A	ND	1	10		µg, Total	1	06/19/09 00:18
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	06/19/09 00:18
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	06/19/09 00:18
Nitrobenzene	A	ND	1	10	WJ	µg, Total	1	06/19/09 00:18
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	06/19/09 00:18
Phenol	A	ND	0.4	10		µg, Total	1	06/19/09 00:18
Surr: 2,4,6-Tribromophenol	S	78.5	0	40.5-97		%REC	1	06/19/09 00:18
Surr: 2-Fluorobiphenyl	S	48.5	0	32.7-83.2		%REC	1	06/19/09 00:18
Surr: 2-Fluorophenol	S	39.4	0	20.5-87.9		%REC	1	06/19/09 00:18
Surr: Nitrobenzene-d5	S	60.4	0	33.7-77.1		%REC	1	06/19/09 00:18
Surr: Phenol-d5	S	45.9	0	32.7-80.9		%REC	1	06/19/09 00:18
Surr: Terphenyl-d14	S	42.8	0	22.7-96.5		%REC	1	06/19/09 00:18

PAHS BY GC/MS-SIM	Method: TO-13		Prep Date/Time: 06/17/09 13:00 Analyst: BEM					
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	06/19/09 00:18
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	06/19/09 00:18
Anthracene	A	ND	0.27	1.0		µg, Total	1	06/19/09 00:18
Benz[a]anthracene	A	ND	0.47	1.0	WJ	µg, Total	1	06/19/09 00:18
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	06/19/09 00:18
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	06/19/09 00:18
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	06/19/09 00:18
Benzo[k]fluoranthene	A	ND	0.8	1.0	WJ	µg, Total	1	06/19/09 00:18
Chrysene	A	ND	0.57	1.0	WJ	µg, Total	1	06/19/09 00:18
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	06/19/09 00:18
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	06/19/09 00:18
Fluorene	A	ND	0.25	1.0		µg, Total	1	06/19/09 00:18
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	06/19/09 00:18
Naphthalene	A	ND	0.16	1.0		µg, Total	1	06/19/09 00:18
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	06/19/09 00:18
Pyrene	A	ND	0.44	1.0	WJ	µg, Total	1	06/19/09 00:18
Surr: Nitrobenzene-d5	S	60.4	0	33.7-77.1		%REC	1	06/19/09 00:18
Surr: 2-Fluorobiphenyl	S	48.5	0	32.7-83.2		%REC	1	06/19/09 00:18
Surr: Terphenyl-d14	S	42.8	0	22.7-96.5		%REC	1	06/19/09 00:18

16/31/09

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-03B
Collection Date: 06/10/09 13:03
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE	Method: TO-13MOD		Prep Date/Time: 06/17/09 13:00 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	06/19/09 00:39
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	06/19/09 00:39
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	06/19/09 00:39
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 00:39
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 00:39
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	06/19/09 00:39
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	06/19/09 00:39
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	06/19/09 00:39
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 00:39
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
2-Methylphenol	A	ND	0.7	10		µg, Total	1	06/19/09 00:39
2-Nitroaniline	A	ND	1	50		µg, Total	1	06/19/09 00:39
2-Nitrophenol	A	ND	1	10		µg, Total	1	06/19/09 00:39
3,3'-Dichlorobenzidine	A	ND	0.7	50	WS	µg, Total	1	06/19/09 00:39
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	06/19/09 00:39
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 00:39
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	06/19/09 00:39
4-Bromophenyl phenyl ether	A	ND	0.9	10	WS	µg, Total	1	06/19/09 00:39
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	06/19/09 00:39
4-Chloroaniline	A	ND	1	10		µg, Total	1	06/19/09 00:39
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	06/19/09 00:39
4-Nitrophenol	A	ND	4.3	50	WS	µg, Total	1	06/19/09 00:39
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	06/19/09 00:39
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	WS	µg, Total	1	06/19/09 00:39
Butyl benzyl phthalate	A	ND	1	10	WS	µg, Total	1	06/19/09 00:39
Carbazole	A	ND	1.2	10		µg, Total	1	06/19/09 00:39
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	06/19/09 00:39
Di-n-octyl phthalate	A	ND	1.1	10		µg, Total	1	06/19/09 00:39
Dibenzofuran	A	ND	0.8	10		µg, Total	1	06/19/09 00:39
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	06/19/09 00:39
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	06/19/09 00:39
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 00:39

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

183109

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #3 TOX 1 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-03B
Collection Date: 06/10/09 13:03
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		ug, Total	1	06/19/09 00:39
Hexachlorocyclopentadiene	A	ND	0.6	10		ug, Total	1	06/19/09 00:39
Hexachloroethane	A	ND	0.9	10		ug, Total	1	06/19/09 00:39
Isophorone	A	ND	1	10		ug, Total	1	06/19/09 00:39
N-Nitrosodi-n-propylamine	A	ND	1	10		ug, Total	1	06/19/09 00:39
N-Nitrosodiphenylamine	A	ND	0.7	10		ug, Total	1	06/19/09 00:39
Nitrobenzene	A	ND	1	10	WS	ug, Total	1	06/19/09 00:39
Pentachlorophenol	A	ND	1.3	50		ug, Total	1	06/19/09 00:39
Phenol	A	ND	0.4	10		ug, Total	1	06/19/09 00:39
<i>Surr: 2,4,6-Tribromophenol</i>	S	78.4	0	40.5-97		%REC	1	06/19/09 00:39
<i>Surr: 2-Fluorobiphenyl</i>	S	43.7	0	32.7-83.2		%REC	1	06/19/09 00:39
<i>Surr: 2-Fluorophenol</i>	S	39.0	0	20.5-87.9		%REC	1	06/19/09 00:39
<i>Surr: Nitrobenzene-d5</i>	S	60.5	0	33.7-77.1		%REC	1	06/19/09 00:39
<i>Surr: Phenol-d5</i>	S	49.0	0	32.7-80.9		%REC	1	06/19/09 00:39
<i>Surr: Terphenyl-d14</i>	S	43.7	0	22.7-96.5		%REC	1	06/19/09 00:39

PAHS BY GC/MS-SIM		Method: TO-13						
		Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		ug, Total	1	06/19/09 00:39
Acenaphthylene	A	ND	0.22	1.0		ug, Total	1	06/19/09 00:39
Anthracene	A	ND	0.27	1.0		ug, Total	1	06/19/09 00:39
Benzo[a]anthracene	A	ND	0.47	1.0	WS	ug, Total	1	06/19/09 00:39
Benzo[a]pyrene	A	ND	0.38	1.0		ug, Total	1	06/19/09 00:39
Benzo[b]fluoranthene	A	ND	0.44	1.0		ug, Total	1	06/19/09 00:39
Benzo[g,h,i]perylene	A	ND	0.72	1.0		ug, Total	1	06/19/09 00:39
Benzo[k]fluoranthene	A	ND	0.8	1.0	WS	ug, Total	1	06/19/09 00:39
Chrysene	A	ND	0.57	1.0	WS	ug, Total	1	06/19/09 00:39
Dibenz[a,h]anthracene	A	ND	0.54	1.0		ug, Total	1	06/19/09 00:39
Fluoranthene	A	ND	0.39	1.0		ug, Total	1	06/19/09 00:39
Fluorene	A	ND	0.25	1.0		ug, Total	1	06/19/09 00:39
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		ug, Total	1	06/19/09 00:39
Naphthalene	A	ND	0.16	1.0		ug, Total	1	06/19/09 00:39
Phenanthrene	A	ND	0.27	1.0		ug, Total	1	06/19/09 00:39
Pyrene	A	ND	0.44	1.0	WS	ug, Total	1	06/19/09 00:39
<i>Surr: Nitrobenzene-d5</i>	S	60.5	0	33.7-77.1		%REC	1	06/19/09 00:39
<i>Surr: 2-Fluorobiphenyl</i>	S	43.7	0	32.7-83.2		%REC	1	06/19/09 00:39
<i>Surr: Terphenyl-d14</i>	S	43.7	0	22.7-96.5		%REC	1	06/19/09 00:39

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-04B
Collection Date: 06/10/09 13:45
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE Method: TO-13MOD		Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
1,2,4-Trichlorobenzene	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
1,2-Dichlorobenzene	A	ND	0.7	10		ug, Total	1	06/19/09 01:00
1,3-Dichlorobenzene	A	ND	0.8	10		ug, Total	1	06/19/09 01:00
1,4-Dichlorobenzene	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
2,4,5-Trichlorophenol	A	ND	1.5	10		ug, Total	1	06/19/09 01:00
2,4,6-Trichlorophenol	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
2,4-Dichlorophenol	A	ND	0.7	10		ug, Total	1	06/19/09 01:00
2,4-Dimethylphenol	A	ND	0.8	10		ug, Total	1	06/19/09 01:00
2,4-Dinitrophenol	A	ND	9.4	50		ug, Total	1	06/19/09 01:00
2,4-Dinitrotoluene	A	ND	0.8	10		ug, Total	1	06/19/09 01:00
2,6-Dinitrotoluene	A	ND	1.1	10		ug, Total	1	06/19/09 01:00
2-Chloronaphthalene	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
2-Chlorophenol	A	ND	0.7	10		ug, Total	1	06/19/09 01:00
2-Methylnaphthalene	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
2-Methylphenol	A	ND	0.7	10		ug, Total	1	06/19/09 01:00
2-Nitroaniline	A	ND	1	50		ug, Total	1	06/19/09 01:00
2-Nitrophenol	A	ND	1	10		ug, Total	1	06/19/09 01:00
3,3'-Dichlorobenzidine	A	ND	0.7	50	US	ug, Total	1	06/19/09 01:00
3-Nitroaniline	A	ND	1.3	50		ug, Total	1	06/19/09 01:00
3/4-Methylphenol	A	ND	0.8	10		ug, Total	1	06/19/09 01:00
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		ug, Total	1	06/19/09 01:00
4-Bromophenyl phenyl ether	A	ND	0.9	10	US	ug, Total	1	06/19/09 01:00
4-Chloro-3-methylphenol	A	ND	1.2	20		ug, Total	1	06/19/09 01:00
4-Chloroaniline	A	ND	1	10		ug, Total	1	06/19/09 01:00
4-Chlorophenyl phenyl ether	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
4-Nitroaniline	A	ND	1.7	50		ug, Total	1	06/19/09 01:00
4-Nitrophenol	A	ND	4.3	50	US	ug, Total	1	06/19/09 01:00
Bis(2-chloroethoxy)methane	A	ND	1	10		ug, Total	1	06/19/09 01:00
Bis(2-chloroethyl)ether	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	US	ug, Total	1	06/19/09 01:00
Butyl benzyl phthalate	A	ND	1	10	US	ug, Total	1	06/19/09 01:00
Carbazole	A	ND	1.2	10		ug, Total	1	06/19/09 01:00
Di-n-butyl phthalate	A	ND	1.2	10		ug, Total	1	06/19/09 01:00
Di-n-octyl phthalate	A	ND	1.1	10	US	ug, Total	1	06/19/09 01:00
Dibenzofuran	A	ND	0.8	10		ug, Total	1	06/19/09 01:00
Diethyl phthalate	A	ND	1.1	10		ug, Total	1	06/19/09 01:00
Dimethyl phthalate	A	ND	0.9	10		ug, Total	1	06/19/09 01:00
Hexachlorobenzene	A	ND	0.9	10		ug, Total	1	06/19/09 01:00

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #4 TOX 1 INFLUENT(DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-04B
Collection Date: 06/10/09 13:45
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	06/19/09 01:00
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	06/19/09 01:00
Hexachloroethane	A	ND	0.9	10		µg, Total	1	06/19/09 01:00
Isophorone	A	ND	1	10		µg, Total	1	06/19/09 01:00
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	06/19/09 01:00
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	06/19/09 01:00
Nitrobenzene	A	ND	1	10	UJ	µg, Total	1	06/19/09 01:00
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	06/19/09 01:00
Phenol	A	ND	0.4	10		µg, Total	1	06/19/09 01:00
<i>Surr: 2,4,6-Tribromophenol</i>	S	74.6	0	40.5-97		%REC	1	06/19/09 01:00
<i>Surr: 2-Fluorobiphenyl</i>	S	46.9	0	32.7-83.2		%REC	1	06/19/09 01:00
<i>Surr: 2-Fluorophenol</i>	S	53.6	0	20.5-87.9		%REC	1	06/19/09 01:00
<i>Surr: Nitrobenzene-d5</i>	S	66.5	0	33.7-77.1		%REC	1	06/19/09 01:00
<i>Surr: Phenol-d5</i>	S	60.1	0	32.7-80.9		%REC	1	06/19/09 01:00
<i>Surr: Terphenyl-d14</i>	S	37.0	0	22.7-96.5		%REC	1	06/19/09 01:00

PAHS BY GC/MS-SIM		Method: TO-13 Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	06/19/09 01:00
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	06/19/09 01:00
Anthracene	A	ND	0.27	1.0		µg, Total	1	06/19/09 01:00
Benzo[a]anthracene	A	ND	0.47	1.0		µg, Total	1	06/19/09 01:00
Benzo[a]pyrene	A	ND	0.38	1.0	UJ	µg, Total	1	06/19/09 01:00
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	06/19/09 01:00
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	06/19/09 01:00
Benzo[k]fluoranthene	A	ND	0.8	1.0	UJ	µg, Total	1	06/19/09 01:00
Chrysene	A	ND	0.57	1.0	UJ	µg, Total	1	06/19/09 01:00
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	06/19/09 01:00
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	06/19/09 01:00
Fluorene	A	ND	0.25	1.0		µg, Total	1	06/19/09 01:00
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	06/19/09 01:00
Naphthalene	A	ND	0.16	1.0		µg, Total	1	06/19/09 01:00
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	06/19/09 01:00
Pyrene	A	ND	0.44	1.0	UJ	µg, Total	1	06/19/09 01:00
<i>Surr: Nitrobenzene-d5</i>	S	66.5	0	33.7-77.1		%REC	1	06/19/09 01:00
<i>Surr: 2-Fluorobiphenyl</i>	S	46.9	0	32.7-83.2		%REC	1	06/19/09 01:00
<i>Surr: Terphenyl-d14</i>	S	37.0	0	22.7-96.5		%REC	1	06/19/09 01:00

183109

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-05B
Collection Date: 06/10/09 13:09
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	06/19/09 01:22
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	06/19/09 01:22
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	06/19/09 01:22
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 01:22
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 01:22
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	06/19/09 01:22
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	06/19/09 01:22
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	06/19/09 01:22
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 01:22
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
2-Methylphenol	A	ND	0.7	10		µg, Total	1	06/19/09 01:22
2-Nitroaniline	A	ND	1	50		µg, Total	1	06/19/09 01:22
2-Nitrophenol	A	ND	1	10		µg, Total	1	06/19/09 01:22
3,3'-Dichlorobenzidine	A	ND	0.7	50	NS	µg, Total	1	06/19/09 01:22
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	06/19/09 01:22
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 01:22
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	06/19/09 01:22
4-Bromophenyl phenyl ether	A	ND	0.9	10	NS	µg, Total	1	06/19/09 01:22
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	06/19/09 01:22
4-Chloroaniline	A	ND	1	10		µg, Total	1	06/19/09 01:22
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	06/19/09 01:22
4-Nitrophenol	A	ND	4.3	50	NS	µg, Total	1	06/19/09 01:22
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	06/19/09 01:22
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	NS	µg, Total	1	06/19/09 01:22
Butyl benzyl phthalate	A	ND	1	10	NS	µg, Total	1	06/19/09 01:22
Carbazole	A	ND	1.2	10		µg, Total	1	06/19/09 01:22
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	06/19/09 01:22
Di-n-octyl phthalate	A	ND	1.1	10	NS	µg, Total	1	06/19/09 01:22
Dibenzofuran	A	ND	0.8	10		µg, Total	1	06/19/09 01:22
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	06/19/09 01:22
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 01:22

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ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #5 TOX 1 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-05B
Collection Date: 06/10/09 13:09
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	06/19/09 01:22
Hexachloroethane	A	ND	0.9	10		µg, Total	1	06/19/09 01:22
Isophorone	A	ND	1	10		µg, Total	1	06/19/09 01:22
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	06/19/09 01:22
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	06/19/09 01:22
Nitrobenzene	A	ND	1	10	WT	µg, Total	1	06/19/09 01:22
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	06/19/09 01:22
Phenol	A	ND	0.4	10		µg, Total	1	06/19/09 01:22
<i>Surr: 2,4,6-Tribromophenol</i>	S	95.7	0	40.5-97		%REC	1	06/19/09 01:22
<i>Surr: 2-Fluorobiphenyl</i>	S	68.6	0	32.7-83.2		%REC	1	06/19/09 01:22
<i>Surr: 2-Fluorophenol</i>	S	60.2	0	20.5-87.9		%REC	1	06/19/09 01:22
<i>Surr: Nitrobenzene-d5</i>	S	88.2	0	33.7-77.1	S	%REC	1	06/19/09 01:22
<i>Surr: Phenol-d5</i>	S	71.2	0	32.7-80.9		%REC	1	06/19/09 01:22
<i>Surr: Terphenyl-d14</i>	S	48.2	0	22.7-96.5		%REC	1	06/19/09 01:22

PAHS BY GC/MS-SIM		Method: TO-13 Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	06/19/09 01:22
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	06/19/09 01:22
Anthracene	A	ND	0.27	1.0		µg, Total	1	06/19/09 01:22
Benzo[a]anthracene	A	ND	0.47	1.0	WT	µg, Total	1	06/19/09 01:22
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	06/19/09 01:22
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	06/19/09 01:22
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	06/19/09 01:22
Benzo[k]fluoranthene	A	ND	0.8	1.0	WT	µg, Total	1	06/19/09 01:22
Chrysene	A	ND	0.57	1.0	WT	µg, Total	1	06/19/09 01:22
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	06/19/09 01:22
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	06/19/09 01:22
Fluorene	A	ND	0.25	1.0		µg, Total	1	06/19/09 01:22
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	06/19/09 01:22
Naphthalene	A	ND	0.16	1.0		µg, Total	1	06/19/09 01:22
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	06/19/09 01:22
Pyrene	A	ND	0.44	1.0	WT	µg, Total	1	06/19/09 01:22
<i>Surr: Nitrobenzene-d5</i>	S	88.2	0	33.7-77.1	S	%REC	1	06/19/09 01:22
<i>Surr: 2-Fluorobiphenyl</i>	S	68.6	0	32.7-83.2		%REC	1	06/19/09 01:22
<i>Surr: Terphenyl-d14</i>	S	48.2	0	22.7-96.5		%REC	1	06/19/09 01:22

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-06B
Collection Date: 06/10/09 13:50
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD	Prep Date/Time: 06/17/09 13:00 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	06/19/09 01:43
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	06/19/09 01:43
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	06/19/09 01:43
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 01:43
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 01:43
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	06/19/09 01:43
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	06/19/09 01:43
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	06/19/09 01:43
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 01:43
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
2-Methylphenol	A	ND	0.7	10		µg, Total	1	06/19/09 01:43
2-Nitroaniline	A	ND	1	50		µg, Total	1	06/19/09 01:43
2-Nitrophenol	A	ND	1	10		µg, Total	1	06/19/09 01:43
3,3'-Dichlorobenzidine	A	ND	0.7	50	NS	µg, Total	1	06/19/09 01:43
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	06/19/09 01:43
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 01:43
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	06/19/09 01:43
4-Bromophenyl phenyl ether	A	ND	0.9	10	NS	µg, Total	1	06/19/09 01:43
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	06/19/09 01:43
4-Chloroaniline	A	ND	1	10		µg, Total	1	06/19/09 01:43
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	06/19/09 01:43
4-Nitrophenol	A	ND	4.3	50	NS	µg, Total	1	06/19/09 01:43
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	06/19/09 01:43
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	NS	µg, Total	1	06/19/09 01:43
Butyl benzyl phthalate	A	ND	1	10	NS	µg, Total	1	06/19/09 01:43
Carbazole	A	ND	1.2	10		µg, Total	1	06/19/09 01:43
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	06/19/09 01:43
Di-n-octyl phthalate	A	ND	1.1	10	NS	µg, Total	1	06/19/09 01:43
Dibenzofuran	A	ND	0.8	10		µg, Total	1	06/19/09 01:43
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	06/19/09 01:43
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	06/19/09 01:43
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 01:43

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ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #6 TOX 2 INFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-06B
Collection Date: 06/10/09 13:50
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD							
		Prep Date/Time: 06/17/09 13:00 Analyst: BEM							
		A	ND	0.9	10	µg, Total	1	06/19/09 01:43	
Hexachlorobutadiene		A	ND	0.6	10	µg, Total	1	06/19/09 01:43	
Hexachlorocyclopentadiene		A	ND	0.9	10	µg, Total	1	06/19/09 01:43	
Hexachloroethane		A	ND	1	10	µg, Total	1	06/19/09 01:43	
Isophorone		A	ND	1	10	µg, Total	1	06/19/09 01:43	
N-Nitrosodi-n-propylamine		A	ND	0.7	10	µg, Total	1	06/19/09 01:43	
N-Nitrosodiphenylamine		A	ND	1.3	50	µg, Total	1	06/19/09 01:43	
Nitrobenzene		A	ND	0.4	10	µg, Total	1	06/19/09 01:43	
Pentachlorophenol		S	109	0	40.5-97	S	%REC	1	06/19/09 01:43
Phenol		S	54.9	0	32.7-83.2		%REC	1	06/19/09 01:43
<i>Surr: 2,4,6-Tribromophenol</i>		S	45.7	0	20.5-87.9		%REC	1	06/19/09 01:43
<i>Surr: 2-Fluorobiphenyl</i>		S	71.2	0	33.7-77.1		%REC	1	06/19/09 01:43
<i>Surr: 2-Fluorophenol</i>		S	59.5	0	32.7-80.9		%REC	1	06/19/09 01:43
<i>Surr: Nitrobenzene-d5</i>		S	49.2	0	22.7-96.5		%REC	1	06/19/09 01:43

PAHS BY GC/MS-SIM		Method: TO-13							
		Prep Date/Time: 06/17/09 13:00 Analyst: BEM							
		A	ND	0.21	1.0	µg, Total	1	06/19/09 01:43	
Acenaphthene		A	ND	0.22	1.0	µg, Total	1	06/19/09 01:43	
Acenaphthylene		A	ND	0.27	1.0	µg, Total	1	06/19/09 01:43	
Anthracene		A	ND	0.47	1.0	µg, Total	1	06/19/09 01:43	
Benzo[a]anthracene		A	ND	0.38	1.0	µg, Total	1	06/19/09 01:43	
Benzo[a]pyrene		A	ND	0.44	1.0	µg, Total	1	06/19/09 01:43	
Benzo[b]fluoranthene		A	ND	0.72	1.0	µg, Total	1	06/19/09 01:43	
Benzo[g,h,i]perylene		A	ND	0.8	1.0	µg, Total	1	06/19/09 01:43	
Chrysene		A	ND	0.57	1.0	µg, Total	1	06/19/09 01:43	
Dibenz[a,h]anthracene		A	ND	0.54	1.0	µg, Total	1	06/19/09 01:43	
Fluoranthene		A	ND	0.39	1.0	µg, Total	1	06/19/09 01:43	
Fluorene		A	ND	0.25	1.0	µg, Total	1	06/19/09 01:43	
Indeno[1,2,3cd]pyrene		A	ND	0.56	1.0	µg, Total	1	06/19/09 01:43	
Naphthalene		A	1.1	0.16	1.0	µg, Total	1	06/19/09 01:43	
Phenanthrene		A	ND	0.27	1.0	µg, Total	1	06/19/09 01:43	
Pyrene		A	ND	0.44	1.0	µg, Total	1	06/19/09 01:43	
<i>Surr: Nitrobenzene-d5</i>		S	71.2	0	33.7-77.1		%REC	1	06/19/09 01:43
<i>Surr: 2-Fluorobiphenyl</i>		S	54.9	0	32.7-83.2		%REC	1	06/19/09 01:43
<i>Surr: Terphenyl-d14</i>		S	49.2	0	22.7-96.5		%REC	1	06/19/09 01:43

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9/3/09

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-07B
Collection Date: 06/10/09 14:10
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method:	Prep Date/Time: 06/17/09 13:00 Analyst: BEM					
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	06/19/09 02:05
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	06/19/09 02:05
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	06/19/09 02:05
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 02:05
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 02:05
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	06/19/09 02:05
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	06/19/09 02:05
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	06/19/09 02:05
2-Chloronaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 02:05
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
2-Methylphenol	A	ND	0.7	10		µg, Total	1	06/19/09 02:05
2-Nitroaniline	A	ND	1	50		µg, Total	1	06/19/09 02:05
2-Nitrophenol	A	ND	1	10		µg, Total	1	06/19/09 02:05
3,3'-Dichlorobenzidine	A	ND	0.7	50	US	µg, Total	1	06/19/09 02:05
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	06/19/09 02:05
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 02:05
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	06/19/09 02:05
4-Bromophenyl phenyl ether	A	ND	0.9	10	US	µg, Total	1	06/19/09 02:05
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	06/19/09 02:05
4-Chloroaniline	A	ND	1	10		µg, Total	1	06/19/09 02:05
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	06/19/09 02:05
4-Nitrophenol	A	ND	4.3	50	US	µg, Total	1	06/19/09 02:05
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	06/19/09 02:05
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	US	µg, Total	1	06/19/09 02:05
Butyl benzyl phthalate	A	ND	1	10	US	µg, Total	1	06/19/09 02:05
Carbazole	A	ND	1.2	10		µg, Total	1	06/19/09 02:05
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	06/19/09 02:05
Di-n-octyl phthalate	A	ND	1.1	10	US	µg, Total	1	06/19/09 02:05
Dibenzofuran	A	ND	0.8	10		µg, Total	1	06/19/09 02:05
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	06/19/09 02:05
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 02:05

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ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #7 TOX 2 INFLUENT (DUP)
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-07B
Collection Date: 06/10/09 14:10
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD						
		Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
Hexachlorocyclopentadiene	A	ND	0.6	10		µg, Total	1	06/19/09 02:05
Hexachloroethane	A	ND	0.9	10		µg, Total	1	06/19/09 02:05
Isophorone	A	ND	1	10		µg, Total	1	06/19/09 02:05
N-Nitrosodi-n-propylamine	A	ND	1	10		µg, Total	1	06/19/09 02:05
N-Nitrosodiphenylamine	A	ND	0.7	10		µg, Total	1	06/19/09 02:05
Nitrobenzene	A	ND	1	10	uJ	µg, Total	1	06/19/09 02:05
Pentachlorophenol	A	ND	1.3	50		µg, Total	1	06/19/09 02:05
Phenol	A	ND	0.4	10		µg, Total	1	06/19/09 02:05
Surr: 2,4,6-Tribromophenol	S	73.9	0	40.5-97		%REC	1	06/19/09 02:05
Surr: 2-Fluorobiphenyl	S	40.9	0	32.7-83.2		%REC	1	06/19/09 02:05
Surr: 2-Fluorophenol	S	43.5	0	20.5-87.9		%REC	1	06/19/09 02:05
Surr: Nitrobenzene-d5	S	60.5	0	33.7-77.1		%REC	1	06/19/09 02:05
Surr: Phenol-d5	S	51.5	0	32.7-80.9		%REC	1	06/19/09 02:05
Surr: Terphenyl-d14	S	34.8	0	22.7-96.5		%REC	1	06/19/09 02:05

PAHS BY GC/MS-SIM		Method: TO-13						
		Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0		µg, Total	1	06/19/09 02:05
Acenaphthylene	A	ND	0.22	1.0		µg, Total	1	06/19/09 02:05
Anthracene	A	ND	0.27	1.0		µg, Total	1	06/19/09 02:05
Benzo[a]anthracene	A	ND	0.47	1.0	uJ	µg, Total	1	06/19/09 02:05
Benzo[a]pyrene	A	ND	0.38	1.0		µg, Total	1	06/19/09 02:05
Benzo[b]fluoranthene	A	ND	0.44	1.0		µg, Total	1	06/19/09 02:05
Benzo[g,h,i]perylene	A	ND	0.72	1.0		µg, Total	1	06/19/09 02:05
Benzo[k]fluoranthene	A	ND	0.8	1.0	uJ	µg, Total	1	06/19/09 02:05
Chrysene	A	ND	0.57	1.0	uJ	µg, Total	1	06/19/09 02:05
Dibenz[a,h]anthracene	A	ND	0.54	1.0		µg, Total	1	06/19/09 02:05
Fluoranthene	A	ND	0.39	1.0		µg, Total	1	06/19/09 02:05
Fluorene	A	ND	0.25	1.0		µg, Total	1	06/19/09 02:05
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0		µg, Total	1	06/19/09 02:05
Naphthalene	A	ND	0.16	1.0		µg, Total	1	06/19/09 02:05
Phenanthrene	A	ND	0.27	1.0		µg, Total	1	06/19/09 02:05
Pyrene	A	ND	0.44	1.0	uJ	µg, Total	1	06/19/09 02:05
Surr: Nitrobenzene-d5	S	60.5	0	33.7-77.1		%REC	1	06/19/09 02:05
Surr: 2-Fluorobiphenyl	S	40.9	0	32.7-83.2		%REC	1	06/19/09 02:05
Surr: Terphenyl-d14	S	34.8	0	22.7-96.5		%REC	1	06/19/09 02:05

9/8/2009

ANALYTICAL RESULTS

Date: Tuesday, June 30, 2009

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-08B
Collection Date: 06/10/09 13:58
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD		Prep Date/Time: 06/17/09 13:00				Analyst: BEM
1,2,4-Trichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
1,2-Dichlorobenzene	A	ND	0.7	10		µg, Total	1	06/19/09 02:26
1,3-Dichlorobenzene	A	ND	0.8	10		µg, Total	1	06/19/09 02:26
1,4-Dichlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
2,4,5-Trichlorophenol	A	ND	1.5	10		µg, Total	1	06/19/09 02:26
2,4,6-Trichlorophenol	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
2,4-Dichlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 02:26
2,4-Dimethylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 02:26
2,4-Dinitrophenol	A	ND	9.4	50		µg, Total	1	06/19/09 02:26
2,4-Dinitrotoluene	A	ND	0.8	10		µg, Total	1	06/19/09 02:26
2,6-Dinitrotoluene	A	ND	1.1	10		µg, Total	1	06/19/09 02:26
2-Choronaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
2-Chlorophenol	A	ND	0.7	10		µg, Total	1	06/19/09 02:26
2-Methylnaphthalene	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
2-Methylphenol	A	ND	0.7	10		µg, Total	1	06/19/09 02:26
2-Nitroaniline	A	ND	1	50		µg, Total	1	06/19/09 02:26
2-Nitrophenol	A	ND	1	10		µg, Total	1	06/19/09 02:26
3,3'-Dichlorobenzidine	A	ND	0.7	50	WS	µg, Total	1	06/19/09 02:26
3-Nitroaniline	A	ND	1.3	50		µg, Total	1	06/19/09 02:26
3/4-Methylphenol	A	ND	0.8	10		µg, Total	1	06/19/09 02:26
4,6-Dinitro-2-methylphenol	A	ND	1.1	50		µg, Total	1	06/19/09 02:26
4-Bromophenyl phenyl ether	A	ND	0.9	10	WS	µg, Total	1	06/19/09 02:26
4-Chloro-3-methylphenol	A	ND	1.2	20		µg, Total	1	06/19/09 02:26
4-Chloroaniline	A	ND	1	10		µg, Total	1	06/19/09 02:26
4-Chlorophenyl phenyl ether	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
4-Nitroaniline	A	ND	1.7	50		µg, Total	1	06/19/09 02:26
4-Nitrophenol	A	ND	4.3	50	WS	µg, Total	1	06/19/09 02:26
Bis(2-chloroethoxy)methane	A	ND	1	10		µg, Total	1	06/19/09 02:26
Bis(2-chloroethyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
Bis(2-chloroisopropyl)ether	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
Bis(2-ethylhexyl)phthalate	A	ND	1.1	10	WS	µg, Total	1	06/19/09 02:26
Butyl benzyl phthalate	A	ND	1	10	WS	µg, Total	1	06/19/09 02:26
Carbazole	A	ND	1.2	10		µg, Total	1	06/19/09 02:26
Di-n-butyl phthalate	A	ND	1.2	10		µg, Total	1	06/19/09 02:26
Di-n-octyl phthalate	A	ND	1.1	10	WS	µg, Total	1	06/19/09 02:26
Dibenzofuran	A	ND	0.8	10		µg, Total	1	06/19/09 02:26
Diethyl phthalate	A	ND	1.1	10		µg, Total	1	06/19/09 02:26
Dimethyl phthalate	A	ND	0.9	10		µg, Total	1	06/19/09 02:26
Hexachlorobenzene	A	ND	0.9	10		µg, Total	1	06/19/09 02:26

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

ANALYTICAL RESULTS**Date:***Tuesday, June 30, 2009*

Client: MWH, Inc.
Client Project: June 2009 - Monthly Air / ACS
Client Sample ID: #8 TOX 2 EFFLUENT
Sample Description:
Sample Matrix: Air

Work Order / ID: ME0906505-08B
Collection Date: 06/10/09 13:58
Date Received: 06/10/09 15:30

Analyses	ST	Result	MDL	RL	Qual	Units	DF	Analyzed
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SEMI-VOLATILE ORGANIC ANALYTE		Method: TO-13MOD Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Hexachlorobutadiene	A	ND	0.9	10	µg, Total	1	06/19/09 02:26	
Hexachlorocyclopentadiene	A	ND	0.6	10	µg, Total	1	06/19/09 02:26	
Hexachloroethane	A	ND	0.9	10	µg, Total	1	06/19/09 02:26	
Isophorone	A	ND	1	10	µg, Total	1	06/19/09 02:26	
N-Nitrosodi-n-propylamine	A	ND	1	10	µg, Total	1	06/19/09 02:26	
N-Nitrosodiphenylamine	A	ND	0.7	10	µg, Total	1	06/19/09 02:26	
Nitrobenzene	A	ND	1	10	µg, Total	1	06/19/09 02:26	
Pentachlorophenol	A	ND	1.3	50	µg, Total	1	06/19/09 02:26	
Phenol	A	ND	0.4	10	µg, Total	1	06/19/09 02:26	
<i>Surr: 2,4,6-Tribromophenol</i>	S	89.7	0	40.5-97	%REC	1	06/19/09 02:26	
<i>Surr: 2-Fluorobiphenyl</i>	S	58.7	0	32.7-83.2	%REC	1	06/19/09 02:26	
<i>Surr: 2-Fluorophenol</i>	S	52.0	0	20.5-87.9	%REC	1	06/19/09 02:26	
<i>Surr: Nitrobenzene-d5</i>	S	75.8	0	33.7-77.1	%REC	1	06/19/09 02:26	
<i>Surr: Phenol-d5</i>	S	61.6	0	32.7-80.9	%REC	1	06/19/09 02:26	
<i>Surr: Terphenyl-d14</i>	S	49.6	0	22.7-96.5	%REC	1	06/19/09 02:26	

PAHS BY GC/MS-SIM		Method: TO-13 Prep Date/Time: 06/17/09 13:00 Analyst: BEM						
Acenaphthene	A	ND	0.21	1.0	µg, Total	1	06/19/09 02:26	
Acenaphthylene	A	ND	0.22	1.0	µg, Total	1	06/19/09 02:26	
Anthracene	A	ND	0.27	1.0	µg, Total	1	06/19/09 02:26	
Benz[a]anthracene	A	ND	0.47	1.0	µg, Total	1	06/19/09 02:26	
Benz[a]pyrene	A	ND	0.38	1.0	µg, Total	1	06/19/09 02:26	
Benz[b]fluoranthene	A	ND	0.44	1.0	µg, Total	1	06/19/09 02:26	
Benz[g,h,i]perylene	A	ND	0.72	1.0	µg, Total	1	06/19/09 02:26	
Benz[k]fluoranthene	A	ND	0.8	1.0	µg, Total	1	06/19/09 02:26	
Chrysene	A	ND	0.57	1.0	µg, Total	1	06/19/09 02:26	
Dibenz[a,h]anthracene	A	ND	0.54	1.0	µg, Total	1	06/19/09 02:26	
Fluoranthene	A	ND	0.39	1.0	µg, Total	1	06/19/09 02:26	
Fluorene	A	ND	0.25	1.0	µg, Total	1	06/19/09 02:26	
Indeno[1,2,3cd]pyrene	A	ND	0.56	1.0	µg, Total	1	06/19/09 02:26	
Naphthalene	A	ND	0.16	1.0	µg, Total	1	06/19/09 02:26	
Phenanthrene	A	ND	0.27	1.0	µg, Total	1	06/19/09 02:26	
Pyrene	A	ND	0.44	1.0	µg, Total	1	06/19/09 02:26	
<i>Surr: Nitrobenzene-d5</i>	S	75.8	0	33.7-77.1	%REC	1	06/19/09 02:26	
<i>Surr: 2-Fluorobiphenyl</i>	S	58.7	0	32.7-83.2	%REC	1	06/19/09 02:26	
<i>Surr: Terphenyl-d14</i>	S	49.6	0	22.7-96.5	%REC	1	06/19/09 02:26	

1/28/09